

HAZARDOUS MATERIALS SURVEYS

For

**NATIONAL OCEANIC & ATMOSPHERIC
ADMINISTRATION**

PRIBILOF FACILITIES

ST. PAUL, ALASKA

- **NOAA STAFF QUARTERS BUILDING**
- **LABORATORY ADMINISTRATION BUILDING**
- **HEALTH CLINIC BUILDING**
- **AREA 51 LOT**

FINAL REPORT

November 2003

Prepared by:


ENVIRONMENTAL &
INSTRUMENTATION
1611 East 1st Avenue
Anchorage, Alaska 99501



EXECUTIVE SUMMARY

Hazardous Material Surveys National Oceanic & Atmospheric Administration Staff Quarters, Laboratory Administration, Health Clinic Facilities, and Area 51 St. Paul, Alaska

PSI Environmental and Instrumentation (PSI) was contracted by the National Oceanic & Atmospheric Administration (NOAA) to perform hazardous material surveys of several buildings on the Pribilof Islands of St. Paul and St. George, Alaska. This report summarizes the findings from surveys conducted at the St. Paul Staff Quarters Building, Laboratory Administration Building, Health Clinic Building, and Area 51.

PSI inspected the buildings for the presence, extent, and condition of possible asbestos-containing materials (ACM), lead-based paint, leachable lead in building debris, mercury-containing items, polychlorinated biphenyls (PCB) ballasts in light fixtures and items containing radioactive compounds. The purpose of these inspections were to identify hazardous materials that may be disturbed during future renovation or demolition activities.

Samples were collected during the survey to fulfill the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for future renovation or demolition work. Sarah Kenshalo of PSI, accompanied by Brian Morgan of EHS-Alaska, Inc. (EHS) performed an inspection and collected samples from building materials on October 14 and 15, 2002.

This report includes field and laboratory data sheets provided as Appendix A, building plans displaying sample locations as Appendix B, a summary cost estimate for the removal and disposal of identified hazardous wastes from each building as Appendix C, and a photo log (Appendix D) showing materials identified during each building survey.

The following table summarizes the surveys findings:

Hazardous Materials Identified at St. Paul Facilities

Hazardous Material	Location	Comments
<i>Staff Quarters Building</i>		
Asbestos Containing Wall Board Joint Compound	Throughout Building	Non-friable
Asbestos Containing Ceiling Tile Mastic	Library	Non-friable
Asbestos Containing Incandescent Light Insulating Paper	Approx. 10 Fixtures	Friable
Asbestos Containing Fire Door Insulation	Boiler Room & Between Library and Hallway	Friable

Asbestos Containing Roof Tarpaper	Beneath Roof Shingles	Non-friable
Asbestos Containing Cement Roof Shingles	Building Roof	Non-friable
Asbestos Containing Flange Gaskets and Valve Packing	Throughout Building	Assumed to Contain Asbestos
Asbestos Containing Dusts	Throughout Building	Potential to Encounter Asbestos Dusts
Lead Containing Solder on Pipe and Fittings	Throughout Building	Throughout Building
Lead Containing Dusts	Throughout Building	Potential to Encounter Lead Dusts
PCB Containing Ballasts	Approx. 40 Fluorescent Light Fixtures	Assumed to Contain PCBs
Mercury Containing Light Bulbs	Approx. 80 Fluorescent Light Bulbs	Assumed to Contain Mercury
Lab Administration Building		
Asbestos Containing Floor Tile and Mastic	Northern two-thirds of Facility	Non-friable
Asbestos Containing Self Adhesive Floor Tile	Southern Portion of Building in Corridor, Lab and Restrooms	Non-friable
Asbestos Containing Sink Undercoating	Approx. 12 Sinks Throughout Building	Non-friable
Asbestos Containing Rope Boiler Gasket	Mechanical Room	Non-friable
Asbestos Containing Roof Tarpaper	Beneath Cement Roof Shingles	Non-friable
Asbestos Containing Cement Roof Shingles	Building Roof	Non-friable
Asbestos Containing Flange Gaskets, Boiler Gaskets, and Valve Packing	Throughout Building	Assumed to Contain Asbestos
Asbestos Containing Dusts	Throughout Building	Potential to Encounter Asbestos Dusts
Lead Containing Paint	Fascia on Exterior of Building	2 Locations Above Threshold Limits
Lead Containing Solder on Pipe and Tubing	Throughout Building	Assumed to contain Metallic Lead
Lead Containing Dusts	Throughout Building	Potential to Encounter Lead Dusts
PCB Containing Ballasts	Approx. 65 Fluorescent Light Fixtures	Assumed to Contain PCBs
Mercury Containing Light Bulbs	Approx. 160 Fluorescent Light Bulbs	Assumed to Contain Mercury
Health Clinic Building		
Asbestos Containing Wall Board Joint Compound	Throughout Building	Non-friable
Asbestos Containing Floor Tile and Mastic	South and Center Portion of Building	Non-friable
Asbestos Containing Sink Undercoating	Approx. 10 Sinks Throughout Building	Non-friable
Asbestos Containing Cement Roof Shingles	Building Roof	Non-friable



Asbestos Containing Flange Gaskets, Boiler Gaskets, and Valve Packings	Throughout Building	Assumed to Contain Asbestos
Asbestos Containing Fire Door Insulation	3 Doors in Basement	Friable
Asbestos Containing Dusts	Throughout Building	Potential to Encounter Asbestos Dusts
Lead Containing Paint	Throughout Interior of Building	10 Locations Above Threshold Limits
Lead Containing Solder on Pipe and Tubing	Throughout Building	Assumed to contain Metallic Lead
Lead Containing Dusts	Throughout Building	Potential to Encounter Lead Dusts
Lead Sheetting	Walls of X-Ray Rooms	Assumed But Not Detected
Lead Containing Batteries	Emergency Lights	Lead Acid Batteries
PCB Containing Ballasts	Approx. 150 Fluorescent Light Fixtures	Assumed to Contain PCBs
Radioactive Material	Self-illuminating Exit Signs	3 Identified
Area 51		
Asbestos Containing Cement Shingles	Fragmented Pieces Throughout Area	Non-friable

Removal, disposal and demolition activities, as well as working with or around hazardous materials may require workers to follow specific state or federal procedures, safeguards, and/or monitoring to protect the health and safety of building inhabitants, workers and the environment.

The following report address, in more detail, the areas investigated during this survey, the locations of samples collected, instrumentation and analytical sample results, applicable photographs and regulatory constraints for the hazardous materials identified.

HAZARDOUS MATERIALS SURVEY

**For
NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
PRIBILOF FACILITIES
ST. PAUL, ALASKA**



NOAA STAFF QUARTERS

**FINAL REPORT
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Prepared by:



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1611 East 1st Avenue
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ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Materials
CFR	Code of Federal Regulations
EHS	EHS Alaska, Inc.
EPA	Environmental Protection Agency
IATL	International Asbestos Testing Laboratories
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NOAA	National Oceanic & Atmospheric Administration
NRC	Nuclear Regulatory Commission
NVLAP	National Voluntary Laboratory Accredited Program
OSHA	Occupational Safety and Health Administration
PCB	Poly-chlorinated Biphenyls
PLM	Polarized Light Microscopy
PSI	PSI Environmental & Instrumentation
TCLP	Toxic Characteristics Leachate Procedure
TEM	Transmission Electron Microscopy
XRF	X-Ray Fluorescence

1.0 INTRODUCTION

PSI Environmental & Instrumentation (PSI) was contracted by the National Oceanic & Atmospheric Administration (NOAA) to perform hazardous material surveys of several buildings on St. Paul and St George Islands, Alaska. Buildings on St. Paul Island include the NOAA Staff Quarters, the NOAA Laboratory Administration Building, the St. Paul Health Clinic Building, and an area of the lot behind the Staff Quarters Building, called Area 51. This report summarizes the survey performed at the Staff Quarters. Drawings supplied by NOAA indicate that the building was built in approximately 1973. Samples were collected during the survey to fulfill the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for future renovation or demolition work. Sarah Kenshalo of PSI, accompanied by Brian Morgan of EHS-Alaska, Inc. (EHS) performed an inspection and collected samples from building materials on October 14 and 15, 2002.

2.0 SCOPE OF WORK

Personnel inspected the building for the presence, extent, and condition of possible asbestos-containing materials (ACM), lead-based paint, leachable lead in building debris, mercury-containing items, polychlorinated biphenyls (PCB) ballasts in light fixtures and items containing radioactive compounds. The purpose of the inspection was to identify hazardous materials that may be disturbed during future renovation or demolition activities. Field and laboratory data sheets are included as Appendix A, building plans displaying sample locations are presented in Appendix B. A summary cost estimate has been prepared for the removal and disposal of identified hazardous wastes from this building, and is included as Appendix C. Appendix D contains a photo log from the survey.

3.0 SAMPLING AND ANALYSIS

3.1 Asbestos-Containing Materials

Personnel performed an inspection of the project building and collected samples of materials suspected of containing asbestos from 49 locations. Mr. Morgan is a U.S. Environmental Protection Agency (EPA) certified building inspector. All samples were analyzed for the presence of asbestos by polarized light microscopy (PLM), the method of analysis recommended by the EPA to determine the composition of suspected asbestos-containing materials. International Asbestos Testing Laboratories (IATL), Mt. Laurel, New Jersey analyzed samples for asbestos content. IATL is a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. Only materials containing more than 1% total asbestos were classified as "asbestos-containing" based on EPA criteria. Table 1 provides a summary list of all samples collected with analytical results. Chain of Custody Record/Field Survey Data sheets and Laboratory reports are included in Appendix A. A floor plan showing locations of samples collected is provided in Appendix B.

Samples Collected October 14-15, 2002

TABLE 1: ASBESTOS SAMPLE SUMMARY

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
SQ1014-A01	Gypsum wallboard	Library, E wall, near N end	None Detected
SQ1014-A02	Joint compound	Library, E wall, near N end	1.3% Chrysotile
SQ1014-A03	2x2 ceiling tile, 1-1/2" aligned fissures and random dots (LCT-1)	Library, E wall, near N end	None Detected
SQ1014-A04	Tan carpet mastic	Library, NE corner	None Detected
SQ1014-A05	Black and tan mastic	Library, NE corner	None Detected
SQ1014-A06	Brown Cove base mastic	Library, W wall, outside NE corner of kitchen	None Detected
SQ1014-A07	Incandescent light insulating paper	Corridor at top of stair landing	None Detected
SQ1014-A08	Sheet vinyl with 4" white squares and tan detail at alternate corners (SV-1)	Kitchen, NW corner	None Detected
SQ1014-A09	Joint compound	Behind switchplate cover on N kitchen wall	2.7% Chrysotile
SQ1014-A10	White sink undercoating	Library, SW corner	None Detected
SQ1014-A11	12 x 12 glue on ceiling tile, 1-1/2" aligned fissures and dots (GCT-1)	Library, N wall	None Detected
SQ1014-A12	Old flooring mastic	Room 10, near hatch in closet	None Detected
SQ1014-A13	Brown ceramic tile mastic	NE corner of women's restroom -24	None Detected
SQ1014-A14	Ceramic tile grout	Women's restroom -24, S of sink	None Detected
SQ1014-A15	Tan ceramic tile mastic	Men's room-23, SE of sink	Trace, < 1%
SQ1014-A16	Tan carpet mastic	Doorway to Boiler room	None Detected
SQ1014-A17	Incandescent light insulating paper	Kitchen, Apartment 12	60% Chrysotile
SQ1014-A18	Fire door insulation	Boiler room door	20% Amosite 3.2% Chrysotile
SQ1014-A19	Joint compound	Boiler room, E wall	1.2% Chrysotile
SQ1014-A20	Gypsum wallboard	Boiler room, N wall	None Detected
SQ1014-A21	Boiler gasket	Boiler room	None Detected
SQ1014-A22	Joint compound	Apartment 13, W wall	1.4% Chrysotile

TABLE 1: ASBESTOS SAMPLE SUMMARY

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
SQ1014-A23	SV-1	Upstairs storage room, NW corner	None Detected
SQ1014-A24	Joint compound	Beam in center of upstairs storage room	1.5% Chrysotile
SQ1014-A25	Dark brown ceiling tile mastic	Just E of upstairs stair landing	1.4% Chrysotile
SQ1014-A26	GCT-1	Just E of upstairs stair landing	None Detected
SQ1014-A27	Brown cove base mastic	Doorway to room 27	None Detected
SQ1014-A28	Tan and black floor mastic	Corridor outside room 20	None Detected
SQ1014-A29	Gypsum wallboard	Attic, above corridor between apartments 23 and 24	None Detected
SQ1014-A30	Mastic beneath ceramic floor tile	Upstairs men's room, center	None Detected
SQ1014-A31	Mastic beneath ceramic wall tile	Upstairs men's room, S wall of shower	None Detected
SQ1014-A32	Fiberboard	Beneath siding at S building entrance	None Detected
SQ1014-A33	Tan styrofoam mastic	Foundation wall beneath room 17	None Detected
SQ1014-A34	Incandescent light insulating paper	Kitchen of apartment 18	65% Chrysotile
SQ1014-A35	Black sink undercoating	Kitchen of apartment 18	None Detected
SQ1014-A36	Fire door insulation	W wall of Library	25% Amosite 4.9% Chrysotile
SQ1014-A37	LCT-1	Library, near N wall	None Detected
SQ1014-A38	LCT-1	Library near S wall	None Detected
SQ1014-A39	GCT-1	Library, SW quadrant	None Detected
SQ1014-A40	Brown GCT mastic	Library, SW quadrant	1.5% Chrysotile
SQ1015-A41	Gypsum wallboard	Exterior, S wall of Library, upper wall	None Detected
SQ1015-A42	Fiberboard	Exterior, S wall of Library, upper wall	None Detected
SQ1015-A43	Roof tarpaper	Upper roof above library, S edge	55% Chrysotile
SQ1015-A44	Cement shingle	Upper roof above library, S edge	25% Chrysotile
SQ1015-A45	Roof penetration sealant	Roof above library	None Detected
SQ1015-A46	Cement shingle	Upper roof above library, N	25% Chrysotile

TABLE 1: ASBESTOS SAMPLE SUMMARY

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
		edge	
SQ1015-A47	Roof tarpaper	Upper roof above library, N edge	50% Chrysotile
SQ1015-A48	Tan styrofoam mastic	Crawl space, S wall beneath room 10	None Detected
SQ1015-A49	Tarpaper	Crawl space beneath N wall of room 10	None Detected
The testing method used (polarized light microscopy [PLM]) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation should be made by quantitative transmission electron microscopy (TEM).			

Joint Compound

The joint compound in the gypsum wallboard system was found to be asbestos-containing. This material was located in walls and ceilings throughout the facility. The material was in good condition and was considered non-friable (not easily crumbled). There was approximately 29,000 square feet of gypsum wallboard/joint compound system in the building.

Glue-on Ceiling Tile Mastic

The mastic utilized to hold the 12" x 12" glue-on ceiling tile in place in the Library was found to be asbestos-containing. The material was in good condition and is considered non-friable. There was approximately 150 square feet of this material in the building.

Incandescent Light Insulating Paper

The incandescent light insulating paper, utilized as a heat shield in various light fixtures was found to be asbestos containing. The material was in fair to good condition depending on location and was considered friable. There were approximately 10 of these heat shields in fixtures throughout the facility.

Fire Door Insulation

The insulation material inside fire doors was found to be asbestos containing. The material was in good condition and was considered friable. There were two of these doors in the facility, one on the boiler room and one between the library and hallway.

Roofing Tarpaper

The tarpaper beneath cement shingles on the roof of the facility was found to be asbestos-containing. The material was in fair to good condition and was considered non-friable. There was approximately 6,500 square feet of this material on the building.

Cement Shingles

The cement shingles on the roof of the facility were found to be asbestos containing. The material was in fair to good condition and was considered non-friable. This material covered approximately 6,500 square feet on the building. No attempt was made to increase the amount of material due to overlap.

Flange Gaskets, Boiler Gaskets and Valve Packings

Flange gaskets and packing on valves could not be sampled without disassembly, but were assumed to contain asbestos based on the age of the equipment.

Settled and Concealed Dusts

Workers should be made aware that the potential exists for encountering dusts containing asbestos.

3.2 Lead-Containing Materials

Lead Paint

Paint was tested for lead at 39 locations throughout the building. Paint was analyzed using a NITON XL309 X-Ray Fluorescence (XRF) lead paint analyzer (Serial # U862NR0666 with software version 5.3). The instrument was operated in the "K & L + Spectra" mode. Prior to testing an instrument self-calibration test was performed and the instrument calibration was checked using a set of government traceable lead paint samples. Calibration was checked using known paint film samples containing 0.0 mg/cm², 0.3 +/- 0.1 mg/cm², 1.0 +/- 0.1 mg/cm², 1.6 +/- 0.2 mg/cm², and 3.5 +/- 0.3 mg/cm² of lead. The instrument was calibrated and all calibration tests were successful. Calibration tests are indicated in the test results table with the word "calibration" in the room column. Sampling results are included in Appendix A. A drawing showing sample locations is included in Appendix B.

The EPA has determined that paints containing lead greater than 1 milligram per square centimeter (mg/cm²) are considered "lead based paints". A single painted surface was found to have paint with lead in excess of the 1.0 mg/cm² threshold. Ceramic wall tile in common restrooms also exceeded the threshold but are not painted.

Although there is no requirement to remove lead-based or lead-containing paints from this building, any loose or peeling paint should be removed to prevent potential lead dust exposure to construction personnel during demolition. Additionally, wherever torch cutting or welding are to take place, paint should be removed from the heat-affected area.

The U.S. Occupational Safety and Health Administration (OSHA) does not recognize a lower limit to the quantity of lead present in paint for their standard, 29 CFR 1926.62, to be in effect. However, lead in paint at the levels found can expose construction/demolition workers to lead levels in excess of the permissible exposure limits set by the OSHA standard if proper work controls and protective equipment are not used during renovation.

Solder on Piping and Tubing

Depending on the age of the piping and tubing, soldered joints typically contain metallic lead.

Settled and Concealed Dusts

Workers should be made aware that the potential exists for encountering dusts containing lead.

Leachable Lead

Personnel performed a survey of the building and collected a composite sample of representative materials for leachable lead analysis. Sampling was performed using the guidelines set forth in the United States Army Environmental Hygiene Agency's *Sampling Protocol – Building Demolition Debris and Buildings Painted with Lead-Based Paint*. This composite sample was analyzed for leachable lead content by means of Toxicity Characteristic Leaching Procedure (TCLP). The composite sample was analyzed by EMSL Analytical, Westmont, New Jersey. The result of this composite sample analysis shows a concentration of <0.4 mg/L of lead, well below the allowable 5 mg/L as established by the EPA. This result indicates that the waste stream of this building would be considered non-hazardous waste with respect to lead. The Chain of Custody Record/Field Survey Data sheets with results are included in Appendix A.

3.3 Polychlorinated Biphenyls (PCB)-Containing Materials

Fluorescent light fixtures were inspected at random for the presence of polychlorinated biphenyl (PCB) containing ballasts. Unless ballasts were specifically labeled "No PCBs", they were assumed to contain PCBs. Approximately 40 PCB-containing ballasts were identified.

3.4 Mercury-Containing Materials

Fluorescent light fixtures were present throughout the project area. Due to their age, all fluorescent lamps were assumed to contain mercury. Prior to disposal, these should be analyzed for leachable mercury content by means of a TCLP procedure. This test will determine whether they are suitable for disposal in a landfill or whether they should be treated as hazardous waste when disposed of. There were approximately 80 of these bulbs in the facility.

4.0 REGULATORY CONSTRAINTS

4.1 Asbestos-Containing Materials

The EPA regulations issued as Title 40 of the Code of Federal Regulations, Part 61 (40 CFR 61) under the National Emission Standards for Hazardous Air Pollutants (NESHAP), established procedures for handling ACM during asbestos removal and waste disposal. These regulations require an owner (or the owner's contractor) to notify the EPA of asbestos removal operations and to establish responsibility for the removal, transportation, and disposal of asbestos. The disposal of asbestos waste is regulated by the EPA, the State of Alaska Department of Environmental Conservation, and the disposal site operator. OSHA regulation 29 CFR 1926.1101 requires air monitoring during ACM removal and during demolition to determine the airborne concentrations of asbestos to which workers may be exposed. 29 CFR 1926.1101 also establishes permissible exposure limits, respiratory protection and protective clothing

requirements, and establishes standard work practices and engineering controls for asbestos removal. All federal, state and local standards regulating asbestos should be followed during renovations of this building.

4.2 Lead-Containing Materials

Federal OSHA requirements (29 CFR 1926.62), and the Alaska Administrative Code (AAC) (8 AAC Chapter 61) have promulgated or adopted regulations that apply to all construction work where employees may be exposed to lead. Due to the presence of lead-containing paint in and on the surfaces to be renovated, the renovation contractor is required to monitor his/her workers to determine if they will be exposed to lead at or above the action level established in the regulation. Until this "initial determination" establishes that workers are not exposed above the permissible exposure limit, the contractor is required to provide worker and site protection procedures. Continued air and medical monitoring may be required if exposure is above the action level.

The EPA requires that actual construction or demolition debris that contains lead or lead-containing paint be tested using the TCLP procedure to determine if the waste must be treated as hazardous waste. In order to classify the lead wastes as hazardous or non-hazardous for disposal purposes, TCLP tests are required by the EPA. The TCLP test determines the leachability of lead from the paint and substrate. Currently, the allowable leachate of lead in order to be classified as a non-hazardous waste is 5 milligrams of lead per liter of leachate (mg/l) or less. Anything above this 5 mg/l level is classified as hazardous waste and must be disposed of in the "lower 48" at an approved permitted Transportation, Storage, Disposal facility. All federal, state and local standards regulating lead and lead-containing wastes should be followed during the demolition of this building.

4.3 PCB-Containing Materials

Products that contain PCBs at 50 ppm or greater are regulated by the EPA. The EPA has promulgated regulations (40 CFR Part 761) that cover the proper handling and disposal of PCB-containing materials. Workers who remove or handle PCB-containing or PCB-contaminated materials or who transport or dispose of PCB wastes must be trained and certified in hazardous waste operations and emergency response (HAZWOPER) as required by 29 CFR 1910.120 and the State of Alaska Department of Labor (8 AAC 61). The Department of Transportation under 49 CFR Parts 100-199 regulates the marking, packaging, handling and transportation of hazardous materials. All federal, state and local standards regulating PCBs should be followed during the demolition of this building.

4.4 Mercury-Containing Materials

Building waste materials containing mercury or mercury compounds are considered hazardous waste if the mercury levels, as determined by a TCLP test of the waste, exceed 0.2 milligrams per liter (0.2 mg/l). The EPA has promulgated regulations (40 CFR Parts 261, 262, and 263) that cover the proper characterization, handling, transportation and disposal of hazardous waste. Workers who remove or handle hazardous waste and transport or dispose of hazardous wastes must be trained and certified in HAZWOPER as required 29 CFR 1910.120 and the State of Alaska Department of Labor (8 AAC 61). The Department of Transportation under 49 CFR Parts 100-199 regulates the marking, packaging, handling and transportation of hazardous

materials. All federal, state and local standards regulating mercury should be followed during the renovation of this building.

APPENDIX A

Bulk Asbestos and TCLP Field Data Sheets, Laboratory Reports and XRF Data

APPENDIX B

Sketches of Sample Locations

APPENDIX C

Abatement Cost Summary

APPENDIX D

PHOTO LOG

APPENDIX A

Bulk Asbestos and TCLP Field Data Sheets, Laboratory Reports and XRF Data



EHS ALASKA
INCORPORATED

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FIELD SURVEY DATA (continued)

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CERTIFICATE OF ANALYSIS**Client:** EHS Alaska Incorporated

10928 Eagle River Rd., Ste 202

Eagle River AK 99577

Report Date: 10/31/2002**Project:** NOAA Pribilofs; StaffQuartersBldg.**Project No.:** 5766-01**BULK SAMPLE ANALYSIS SUMMARY**

Lab No.	1598881	Material Description:	White/Tan Sheetrock		
Client No.:	SQ1014-A01	Location:	Library, E.Wall	Near N.End	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	35	Cellulose	64	
No It Compound		1	Fibrous Glass		


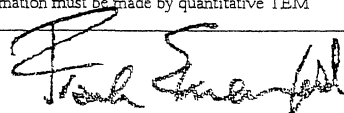
Lab No.	1598882	Material Description:	White Wrap		
Client No.:	SQ1014-A02	Location:	Library, E.Wall	Near N.End	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 1.3	Chrysotile	None Detected	None Detected	PC 98.7	

Lab No.	1598883	Material Description:	Tan Ceiling Tile		
Client No.:	SQ1014-A03	Location:	Library, E.Wall	Near N.End; 2x2	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	75	Mineral Wool	15	
		10	Cellulose		

Lab No.	1598884	Material Description:	Tan Carpet Mastic		
Client No.:	SQ1014-A04	Location:	Library, N.E. Corner		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*

Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.**Analysis Performed By:**
H. Sonny Robb, AIHA-AAR 4883**Approved By:**Frank E. Ehrenfeld, III
Laboratory Director**Date:** OCT 25 2002

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs; StaffQuartersBldg.
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598885	Material Description:	Tan/Black Mastic		
Client No.:	SQ1014-A05	Location:	Library; N.E. Corner		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598886	Material Description:	Brown Covebase Mastic		
Client No.:	SQ1014-A06	Location:	Library; W. Wall	Outside N.E. Corner	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598887	Material Description:	Tan/Grey Insulation		
Client No.:	SQ1014-A07	Location:	Corridor At Top Of	Stair Landing	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	80	Fibrous Glass	20	

Lab No.	1598888	Material Description:	White Vinyl Sheet Floor		
Client No.:	SQ1014-A08	Location:	Tan Mastic	Kitchen; N.W. Corner	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444**

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Analysis Method: EPA 600/R-93/116

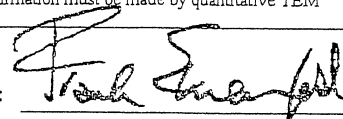
Comments: (PC) Indicates Stratified Point Count Method performed Method not performed unless stated PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM

Analysis Performed By:



Date: OCT 25 2002 H. Sonny Robb, AIHA-AAR 4883

Approved By:

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/31/2002
Project: NOAA Pribilofs; StaffQuartersBldg.
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598888	Material Description:	White Vinyl Sheet Floor		
Client No.:	SQ1014-A08	Location:	Tan Mastic Kitchen; N.W. Corner		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	
Tan Mastic					
From Above					

Lab No.	1598889	Material Description:	Off-White Jt. Compound		
Client No.:	SQ1014-A09	Location:	Behind Switchplate Cover On N. Kitchen Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 2.7	Chrysotile	None Detected	None Detected	PC 97.3	

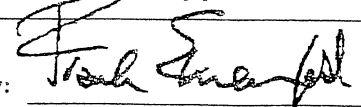
Lab No.	1598890	Material Description:	White Skim Coat Plaster		
Client No.:	SQ1014-A10	Location:	Sink Undercoating Library; S.W. Corner		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598891	Material Description:	Grey Ceiling Tile		
Client No.:	SQ1014-A11	Location:	Library; N. Wall 12x12		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	75	Mineral Wool	15	
		10	Cellulose		

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*

Analysis Method: EPA 600/R-93/116

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Analysis Performed By: Date: **OCT 25 2002** H. Sonny Robb, AIHA-AAR 4883Approved By: Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated

10928 Eagle River Rd., Ste 202

Eagle River AK 99577

Report Date: 10/31/2002**Project:** NOAA Pribilofs; StaffQuartersBldg.**Project No.:** 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598892	Material Description:	Off-WhiteFloorMastic		
Client No.:	SQ1014-A12	Location:	Room 10; Near	Hatch In Closet	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598893	Material Description:	BrnCeramicTileMastic		
Client No.:	SQ1014-A13	Location:	N.E.Cornor OfWomen's	Restroom-24	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598894	Material Description:	Wht.CeramicTileGrout		
Client No.:	SQ1014-A14	Location:	Women'sRestroom-24	S. Of Sink	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598895	Material Description:	TanCeramicTileMastic		
Client No.:	SQ1014-A15	Location:	Men's Room-23	S.E. Of Sink	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC Trace	Chrysotile	None Detected	None Detected	100	

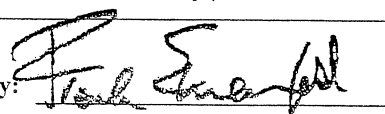
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Analysis Performed By:

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Laboratory Director

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Report Date: 10/25/2002
Project: NOAA Pribilofs; StaffQuartersBldg.
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No. 1598896 **Material Description:** Tan Carpet Mastic
Client No.: SQ1014-A16 **Location:** Doorway To Boiler Room

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No. 1598897 **Material Description:** Grey Insulation
Client No.: SQ1014-A17 **Location:** Kitchen Apartment 12

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
60	Chrysotile	20	Cellulose	20

Lab No. 1598898 **Material Description:** White Insulation
Client No.: SQ1014-A18 **Location:** Boiler Room Fire Door

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
20	Amosite	None Detected	None Detected	PC 76.8
PC 3.2	Chrysotile			

Lab No. 1598899 **Material Description:** Off-WhiteJt.Compound
Client No.: SQ1014-A19 **Location:** Boiler Room; E.Wall

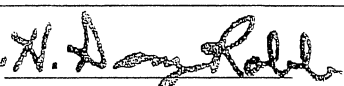
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.2	Chrysotile	None Detected	None Detected	PC 98.8

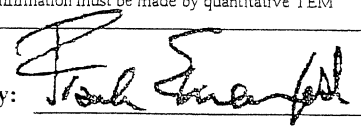
NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444**

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Analysis Performed By: 
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H. Sonny Robb, AIHA-AAR 4883

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Frank E. Ehrenfeld, III
Laboratory Director

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Client: EHS Alaska Incorporated
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Report Date: 10/25/2002
Project: NOAA Pribilofs; StaffQuartersBldg.
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No. 1598900 **Material Description:** White/Tan Sheetrock
Client No.: SQ1014-A20 **Location:** Boiler Room; N.Wall

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose	79
		1	Fibrous Glass	

No Jt Compound

Lab No. 1598901 **Material Description:** Grey Plaster
Client No.: SQ1014-A21 **Location:** Boiler Room Gasket

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	2	Cellulose	98
		Trace	Mineral Wool	

Lab No. 1598902 **Material Description:** Off-White Jt. Compound
Client No.: SQ1014-A22 **Location:** Apartment 13 W.Wall

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.4	Chrysotile	None Detected	None Detected	PC 98.6

Lab No. 1598903 **Material Description:** White Vinyl Sheet Floor
Client No.: SQ1014-A23 **Location:** Upstairs Storage Room N.W. Corner

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

No Mastic

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*

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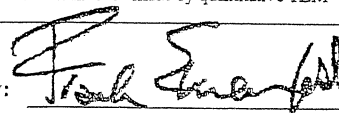
Analysis Performed By:



Date: OCT 25 2002

H. Sonny Robb, AIHA-AAR 4883

Approved By:

Frank E. Ehrenfeld, III
Laboratory Director

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Report Date: 10/25/2002
Project: NOAA Pribilofs; StaffQuartersBldg.
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No. 1598904 **Material Description:** White Joint Compound
Client No.: SQ1014-A24 **Location:** Beam In Center Of UpstairsStorageRoom

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.5	Chrysotile	None Detected	None Detected	PC 98.5

Lab No. 1598905 **Material Description:** Dk.Brown CT Mastic
Client No.: SQ1014-A25 **Location:** Just E. Of Upstairs Stair Landing

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.4	Chrysotile	None Detected	None Detected	PC 98.6

Lab No. 1598906 **Material Description:** Grey Ceiling Tile
Client No.: SQ1014-A26 **Location:** Just E. Of Upstairs Stair Landing

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	65	Mineral Wool	20
		15	Cellulose	

Lab No. 1598907 **Material Description:** BrownCovebaseMastic
Client No.: SQ1014-A27 **Location:** Doorway To Room 27

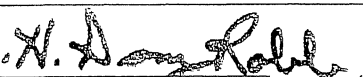
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Other	100

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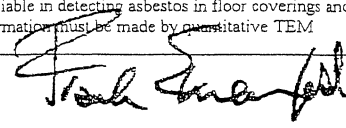
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Analysis Performed By:


H. Sonny Robb, AIHA-AAR 4883

Date: OCT 25 2002

Approved By:


Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs; StaffQuartersBldg
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598908	Material Description:	Tan/Black		
Client No.:	SQ1014-A28	Location:	Floor Tile Mastic	CorridorOutsideRm.20	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598909	Material Description:	White/Tan Sheetrock		
Client No.:	SQ1014-A29	Location:	Attic; AboveCorridor	Btwn. Apts. 23 & 24	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	20	Cellulose	79	
		1	Fibrous Glass		
No Jt Compound					

Lab No.	1598910	Material Description:	BrnCeramicTileMastic		
Client No.:	SQ1014-A30	Location:	Upstairs Men's Room	Center	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598911	Material Description:	TanCeramicTileMastic		
Client No.:	SQ1014-A31	Location:	Upstairs Men's Room	S.Wall Of Shower	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444**

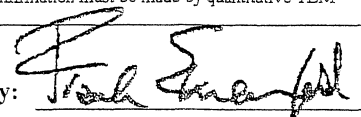
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Analysis Performed By: 

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Laboratory Director

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10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs; StaffQuartersBldg.
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598912	Material Description:	Brown Fibrous		
Client No.:	SQ1014-A32	Location:	Beneath Siding At	S.Building Entrance	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	98	Cellulose	2	

Lab No.	1598913	Material Description:	Tan Styrofoam Mastic		
Client No.:	SQ1014-A33	Location:	Foundation Wall	Beneath Room 17	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

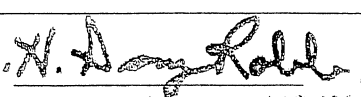
Lab No.	1598914	Material Description:	Grey Insulation		
Client No.:	SQ1014-A34	Location:	Kitchen Of	Apartment 18	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
65	Chrysotile	20	Cellulose	15	

Lab No.	1598915	Material Description:	Black Tar		
Client No.:	SQ1014-A35	Location:	Sink Undercoating	Kitchen Of Apt.18	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

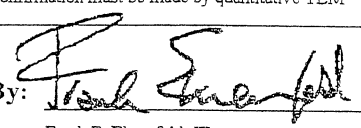
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Analysis Performed By: Date: **OCT 25 2002**

H. Sonny Robb, AIHA-AAR 4083

Approved By: Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
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Report Date: 10/25/2002
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BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598916	Material Description:	Off-White Insulation		
Client No.:	SQ1014-A36	Location:	W. Wall Of Library	Fire Door	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
25	Amosite	None Detected	None Detected	PC 70.1	
PC 4.9	Chrysotile				

Lab No.	1598917	Material Description:	Tan Ceiling Tile		
Client No.:	SQ1014-A37	Location:	Library; Near N. Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	45	Fibrous Glass	15	
		40	Cellulose		

Lab No.	1598918	Material Description:	Tan Ceiling Tile		
Client No.:	SQ1014-A38	Location:	Library; Near S. Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	45	Fibrous Glass	15	
		40	Cellulose		

Lab No.	1598919	Material Description:	Tan Ceiling Tile		
Client No.:	SQ1014-A39	Location:	Library; S.W. Quadrant		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	45	Fibrous Glass	15	
		40	Cellulose		

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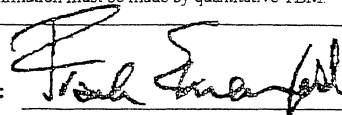
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Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598920	Material Description:	Dk.Brown GCT Mastic		
Client No.:	SQ1014-A40	Location:	Library;S.W.Quadrant		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 1.5	Chrysotile	None Detected	None Detected	PC 98.5	

Lab No.	1598921	Material Description:	Tan Sheetrock		
Client No.:	SQ1015-A41	Location:	Exterior, S.Wall Of	Library; Upper Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	2	Cellulose	98	

No It Compound

Lab No.	1598922	Material Description:	Brown Fibrous		
Client No.:	SQ1015-A42	Location:	Exterior, S.Wall Of	Library; Upper Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	98	Cellulose	2	


Lab No.	1598923	Material Description:	Black Roof Material		
Client No.:	SQ1015-A43	Location:	Upper Roof Above	Library; S.Edge	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
55	Chrysotile	20	Cellulose	25	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444**

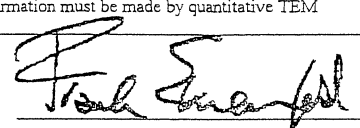
This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.

Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM

Analysis Performed By: 
Date: **OCT 25 2002** H. Sonny Robb, AIHA-AAR 4883

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/31/2002
Project: NOAA Pribilofs; StaffQuartersBldg.
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598924	Material Description:	Grey Transite	
Client No.:	SQ1015-A44	Location:	Upper Roof Above	Library, S.Edge
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
25	Chrysotile	None Detected	None Detected	75

Lab No.	1598925	Material Description:	Black Tar	
Client No.:	SQ1015-A45	Location:	Roof Penetration	Roof Above Library
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	15	Cellulose	85

Lab No.	1598926	Material Description:	Grey Transite	
Client No.:	SQ1015-A46	Location:	Upper Roof Above	Library; N.Edge
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
25	Chrysotile	None Detected	None Detected	75


Lab No.	1598927	Material Description:	Black Roof Material	
Client No.:	SQ1015-A47	Location:	Upper Roof Above	Library; N.Edge
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
50	Chrysotile	20	Cellulose	30

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*


Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.

Analysis Performed By:


H. Sonny Robb, AIHA-AAR 4883

Approved By:


Frank E. Ehrenfeld, III
Laboratory DirectorDate: OCT 25 2002

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated

10928 Eagle River Rd., Ste 202

Eagle River

AK

99577

Report Date: 10/31/2002**Project:** NOAA Pribilofs; StaffQuartersBldg.**Project No.:** 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No. 1598928**Client No.:** SQ1015-A48**Material Description:** Tan Styrofoam Mastic**Location:** Crawl Space; S.Wall Beneath Room 10% AsbestosType% Non-Asbestos Fibrous MaterialType% Non-Fibrous Material

None Detected

None Detected

None Detected

None Detected

100

Lab No. 1598929**Client No.:** SQ1015-A49**Material Description:** Black Tar Paper**Location:** Crawl Space; N.Wall Of Room 10% AsbestosType% Non-Asbestos Fibrous MaterialType% Non-Fibrous Material

None Detected

None Detected

45

Cellulose

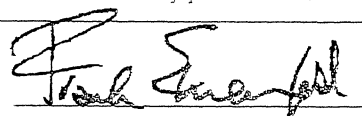
55

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*

Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.**Analysis Performed By:****Date:**

H. Sonny Robb, AIHA-AAR 4863

Approved By:Frank E. Ehrenfeld, III
Laboratory Director



20021031C

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

****RETURN A SIGNED COPY OF THIS FORM WITH THE FINAL REPORT TO EHS-ALASKA**** *HS-9/95*

EMSL Analytical

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-~~200~~ Fax: 8568589551 Email: gmiller1@emsl.com**EMSL**

Attn: Brian L. Morgan
Environmental Health Sciences-Alaska,
10928 Eagle River Road
Suite 202
Eagle River, AK 99577-8052

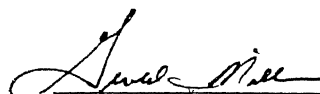
Customer ID: ENVI04
Customer PO:
Received: 10/18/02 12:25 PM

Fax: (907) 694-1382 Phone: 907-694-1383
Project: NOAA Probilofs Survey / Staff Quarters Bldg/ # 5766-01

EMSL Order: 200210316
EMSL Project ID:

Toxicity Characteristic Leaching Procedure (SW846, 1311/7420)

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Analyzed</i>	<i>Lead Concentration</i>	<i>Notes</i>
Sq-tclp1	0001		<0.4 mg/L	



Gerold J. Miller, Ph.D.
Laboratory Director
NJ-NELAP: 04653
AIHA: 100194
or other approved signatory

**Lead Paint Screening
Staff Quarters**

No	Site	Inspector	Room	Structure	Substrate	Feature	Condition	Color	Ssec	Date/Time	Depth Index	Results	
												LBP	mg/cm ²
1	Staff Quarters	Morgan	Shutter Cal	1					60.5	10/14/02 12:07	0 ...	NA	
2	Staff Quarters	Morgan	Calibrate						3.1	10/14/02 12:08	1 NEG		0
3	Staff Quarters	Morgan	Calibrate						7.5	10/14/02 12:08	1 NEG		0.29
4	Staff Quarters	Morgan	Calibrate						22.1	10/14/02 12:08	1 POS		0.99
5	Staff Quarters	Morgan	Calibrate						11.2	10/14/02 12:09	1.1 POS		1.66
6	Staff Quarters	Morgan	Calibrate						8.6	10/14/02 12:10	1.2 POS		3.75
7	Staff Quarters	Morgan	Calibrate	Wall	Drywall		Intact	White	5.5	10/14/02 12:10	1 NEG		0
8	Staff Quarters	Morgan	Calibrate	Wall	Drywall		Intact	White	5.6	10/14/02 12:11	1 NEG		0
9	Staff Quarters	Morgan	Bath	Wall	Cer. Tile		Intact	Tan	4.2	10/14/02 12:11	1.9 POS		18.3
10	Staff Quarters	Morgan	Bath	Wall	Drywall		Intact	Tan	5.6	10/14/02 12:12	6.5 NEG		0.07
11	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	14.8	10/14/02 12:12	1 NEG		-0.76
12	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	7.9	10/14/02 12:13	1 NEG		0
13	Staff Quarters	Morgan	Room	Ceiling	Drywall		Intact	White	7.9	10/14/02 12:14	1 NEG		0
14	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	7.8	10/14/02 12:14	6.6 NEG		0.05
15	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	7.9	10/14/02 12:15	1 NEG		0
16	Staff Quarters	Morgan	Room	Ceiling	Drywall		Intact	White	7.9	10/14/02 12:15	1 NEG		0
17	Staff Quarters	Morgan	Room	Radiator	Metal		Intact	Silver	5.5	10/14/02 12:16	1.5 NEG		0.06
18	Staff Quarters	Morgan	Room	Stairs	Metal	Rail cap	Intact	Black	5.1	10/14/02 12:17	1 NEG		0.04
19	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	14.8	10/14/02 12:18	1 NEG		-0.3
20	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	7.8	10/14/02 12:19	1 NEG		0
21	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	7.8	10/14/02 12:19	1 NEG		0
22	Staff Quarters	Morgan	Room	Door	Wood	Door	Intact	Brown	3.1	10/14/02 12:20	1 NEG		0.05
23	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	10.2	10/14/02 12:20	1 NEG		-0.7
24	Staff Quarters	Morgan	Room	Door	Metal	Casing	Intact	Silver	3.1	10/14/02 12:21	1 NEG		0
25	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	7.8	10/14/02 12:21	1 NEG		0
26	Staff Quarters	Morgan	Room	Radiator	Metal		Intact	Silver	3.3	10/14/02 12:22	1 NEG		0.01
27	Staff Quarters	Morgan	Room	Door	Metal	Casing	Intact	Tan	4.2	10/14/02 12:23	2 POS		11.96
28	Staff Quarters	Morgan	Room	Floor	Cer. Tile		Intact	Tan	12.5	10/14/02 12:23	10 NEG		-0.91
29	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	12.5	10/14/02 12:24	1.4 NEG		-0.54
30	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	10.2	10/14/02 12:24	1 NEG		0
31	Staff Quarters	Morgan	Room	Floor	Concrte		Intact	Grey	21.7	10/14/02 12:25	1 NEG		0
32	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	5.5	10/14/02 12:26	1 NEG		0
33	Staff Quarters	Morgan	Room	Wall	Drywall		Intact	White	5.5	10/14/02 12:26	1 NEG		0
34	Staff Quarters	Morgan	Room	Window	Wood	Sash	Intact	White	3.1	10/14/02 12:27	1 NEG		0
35	Staff Quarters	Morgan	Room	Door	Metal	Door	Intact	Brown	8.2	10/14/02 12:28	10 NEG		-0.91
36	Staff Quarters	Morgan	Room	Door	Metal	Casing	Intact	Brown	11	10/14/02 12:28	10 NEG		-0.39

No	Site	Inspector	Room	Structure	Substrate	Feature	Condition	Color	Ssec	Date/Time	Depth Index	Results	
												LBP	mg/cm ²
37	Staff Quarters	Morgan	Room	Window	Wood	Sash	Intact	White	3.1	10/14/02 12:29	1	NEG	0
38	Staff Quarters	Morgan	Exterior	Wall	Vinyl	Siding	Intact	Yellow	12.6	10/14/02 12:32	1	NEG	-0.31
39	Staff Quarters	Morgan	Exterior	Wall	Vinyl	Siding	Intact	Yellow	17.3	10/14/02 12:33	1	NEG	0.02
40	Staff Quarters	Morgan	Exterior	Wall	Vinyl	Siding	Intact	Yellow	8	10/14/02 12:34	1	NEG	0
41	Staff Quarters	Morgan	Exterior	Wall	Vinyl	Siding	Intact	Yellow	21.9	10/14/02 12:34	1	NEG	0
42	Staff Quarters	Morgan	Calibrate							10/14/02 12:41	1	NEG	0
43	Staff Quarters	Morgan	Calibrate							10/14/02 12:41	1.1	POS	1.07
80	Staff Quarters	Morgan	Exterior	Ext Trim	Wood	Fascia	Intact	White	3.1	10/14/02 17:23	3.4	NEG	0.05
81	Staff Quarters	Morgan	Exterior	Ext Trim	Wood	Fascia	Intact	White	3.1	10/14/02 17:24	2.7	NEG	0.03
82	Staff Quarters	Morgan	Calibrate						3.1	10/14/02 17:25	3.4	NEG	0.05
83	Staff Quarters	Morgan	Calibrate						21.7	10/14/02 17:26	1.1	POS	1.12
84	Staff Quarters	Morgan	Calibrate						4.6	10/14/02 17:26	1.1	POS	3.57

Table Heading Descriptions:

Ssec: This is the nominal time in seconds that each sample was analyzed.

Depth Index:

Indicates the relative depth of the lead. A Depth Index (DI) of less than 1.5 indicates lead very near the surface layer of paint. A DI between 1.5 and 4.0 indicates moderately covered lead. A DI greater than 4.0 indicates the lead paint is deeply buried beneath multiple layers of paint.

LBP:

Results are shown as positive (POS ≥ 1.0 mg/cm²), inconclusive (INC) or negative (NEG < 1.0 mg/cm²). The results are based on the combined results of the K and L shell readings. L shell and K shell readings are not provided. Positive results are also in bold print.

mg/cm²:

This is the testing results produced by the NITON XL-309 instrument in milligrams of lead per square centimeter (mg/cm²). The EPA defines lead based paint as paint containing lead at 1.0 mg/cm² or greater. A negative number is a result of an internal computation made by the instrument and should be interpreted as zero. Even though paint may be termed negative (less than 1.0 mg/cm) by EPA definition, disturbance of the paint may still be regulated by OSHA under 29 CFR 1926.62. Where lead is present at any level, appropriate engineering controls, work practices and personal protective equipment should be used until a negative exposure assessment can be determined.

VOID:

This indicates that the test was intentionally terminated by the operator due to operator error (e.g. - operator moved analyzer while testing).

APPENDIX B

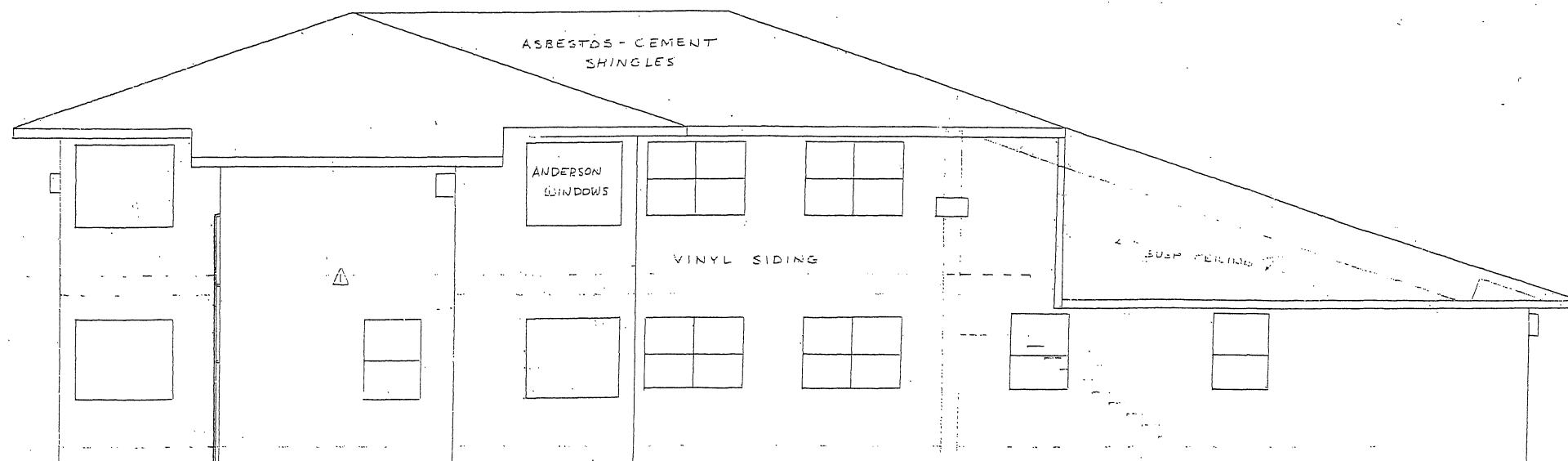
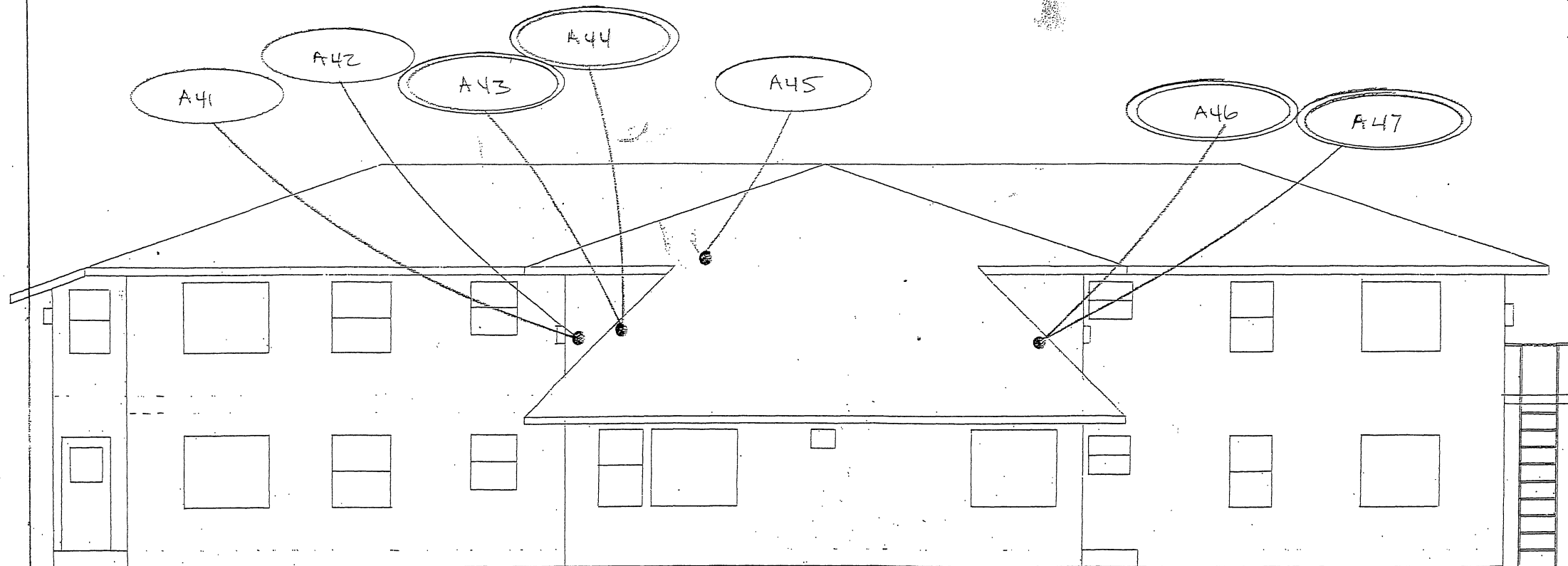
Sketches of Sample Locations

LEGEND

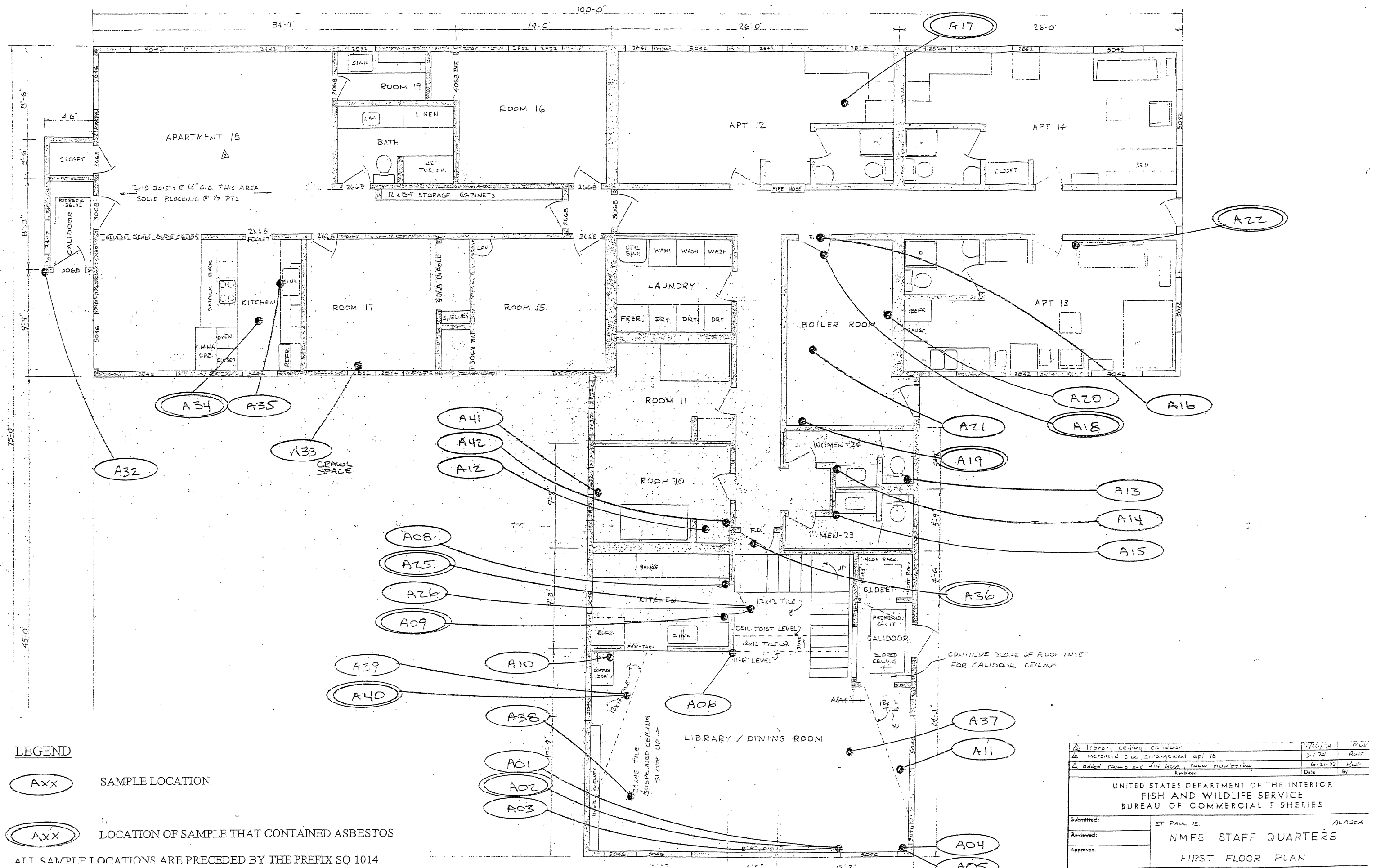
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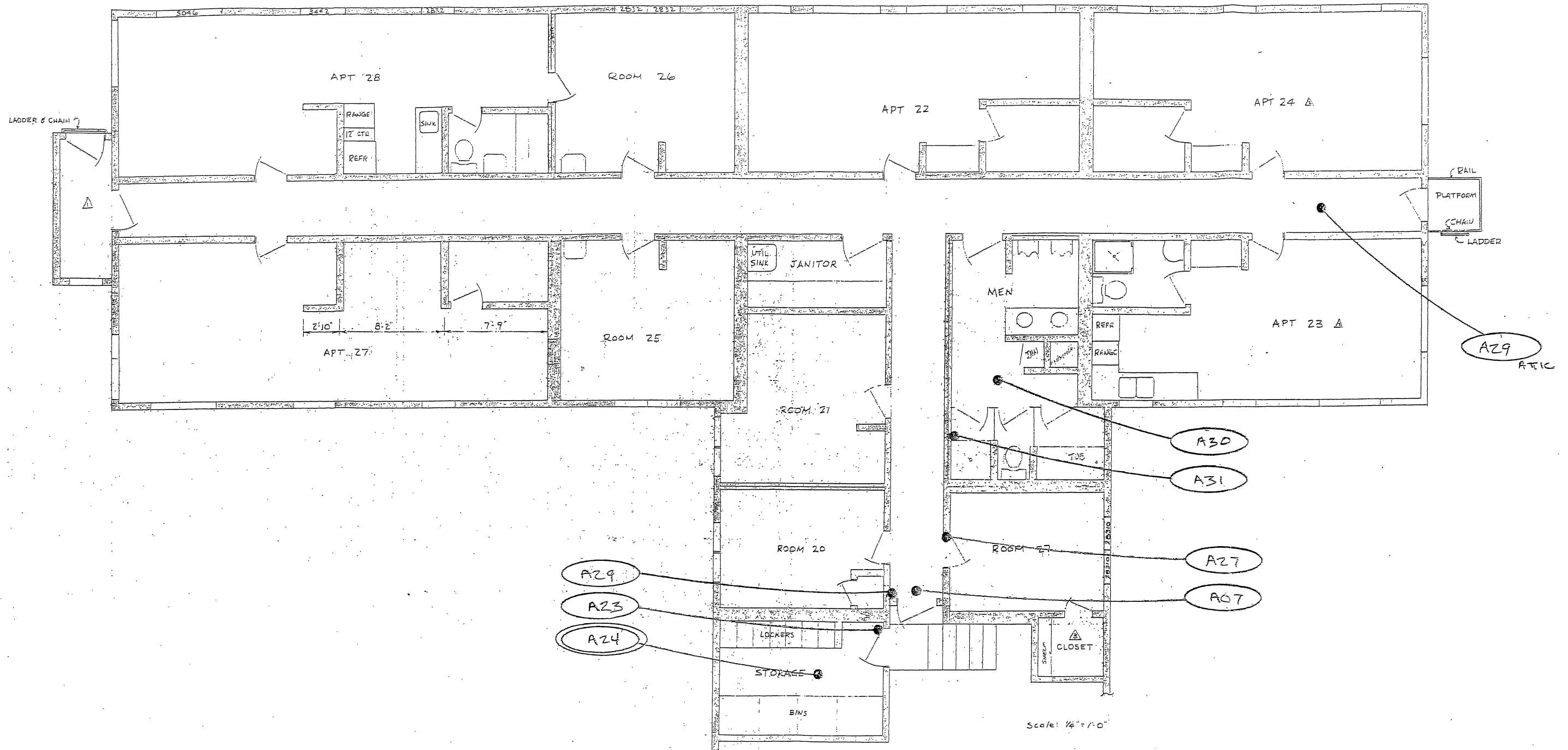
Axx LOCATION OF SAMPLE THAT CONTAINED ASBESTOS

ALL SAMPLE LOCATIONS ARE PRECEDED BY THE PREFIX SQ 1014



A. Addie Exterior Calendars		1-4-74	1974
Revisions		Date	By
UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE BUREAU OF COMMERCIAL FISHERIES			
Submitted:	ST. PAUL IS ALASKA		
Reviewed:	NMFS STAFF QTRS		
Approved:	ELEVATIONS		





LEGEND

Axx

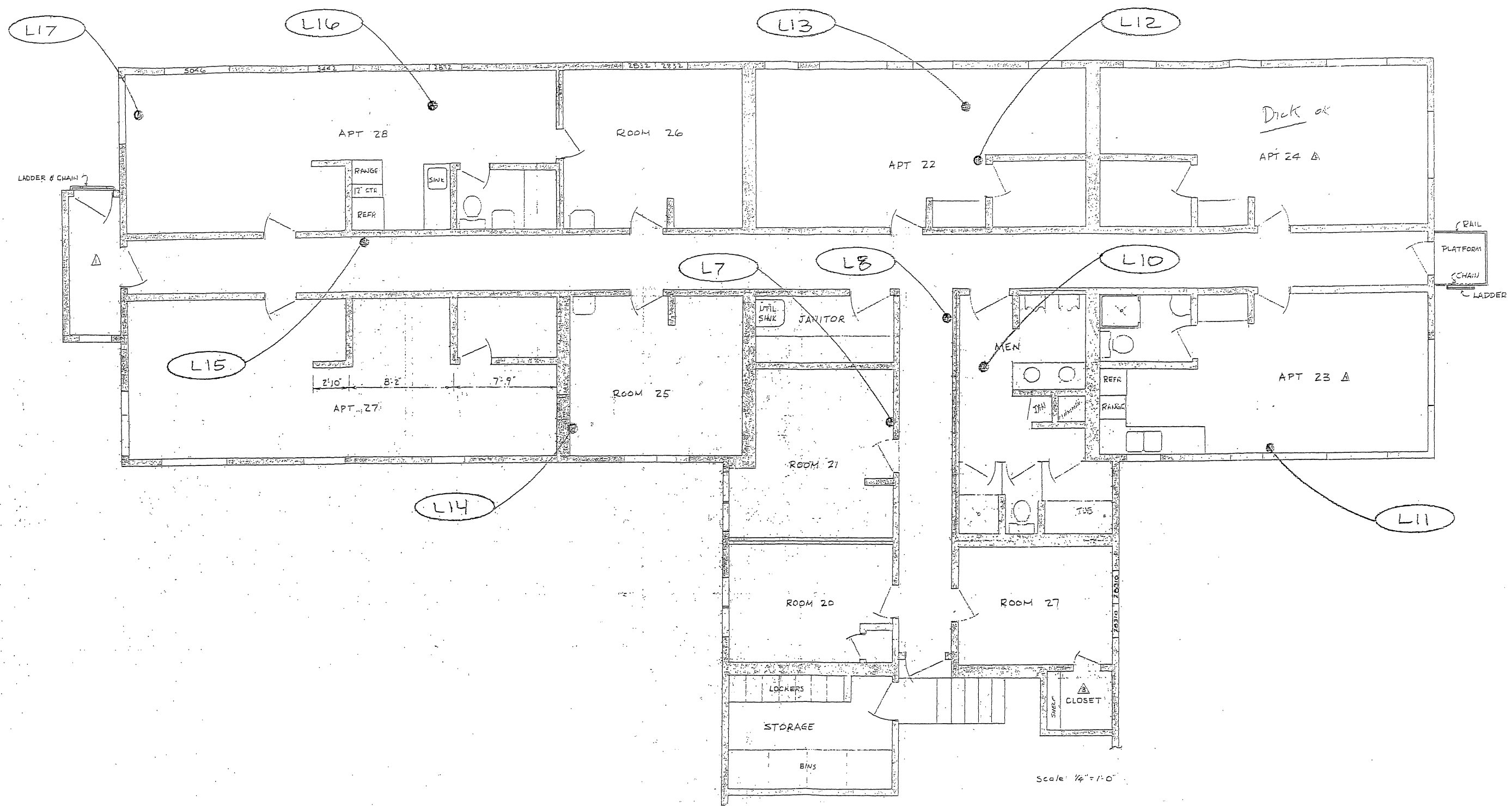
SAMPLE LOCATION

Axx

LOCATION OF SAMPLE THAT CONTAINED ASBESTOS

ALL SAMPLE LOCATIONS ARE PRECEDED BY THE PREFIX SQ 1014

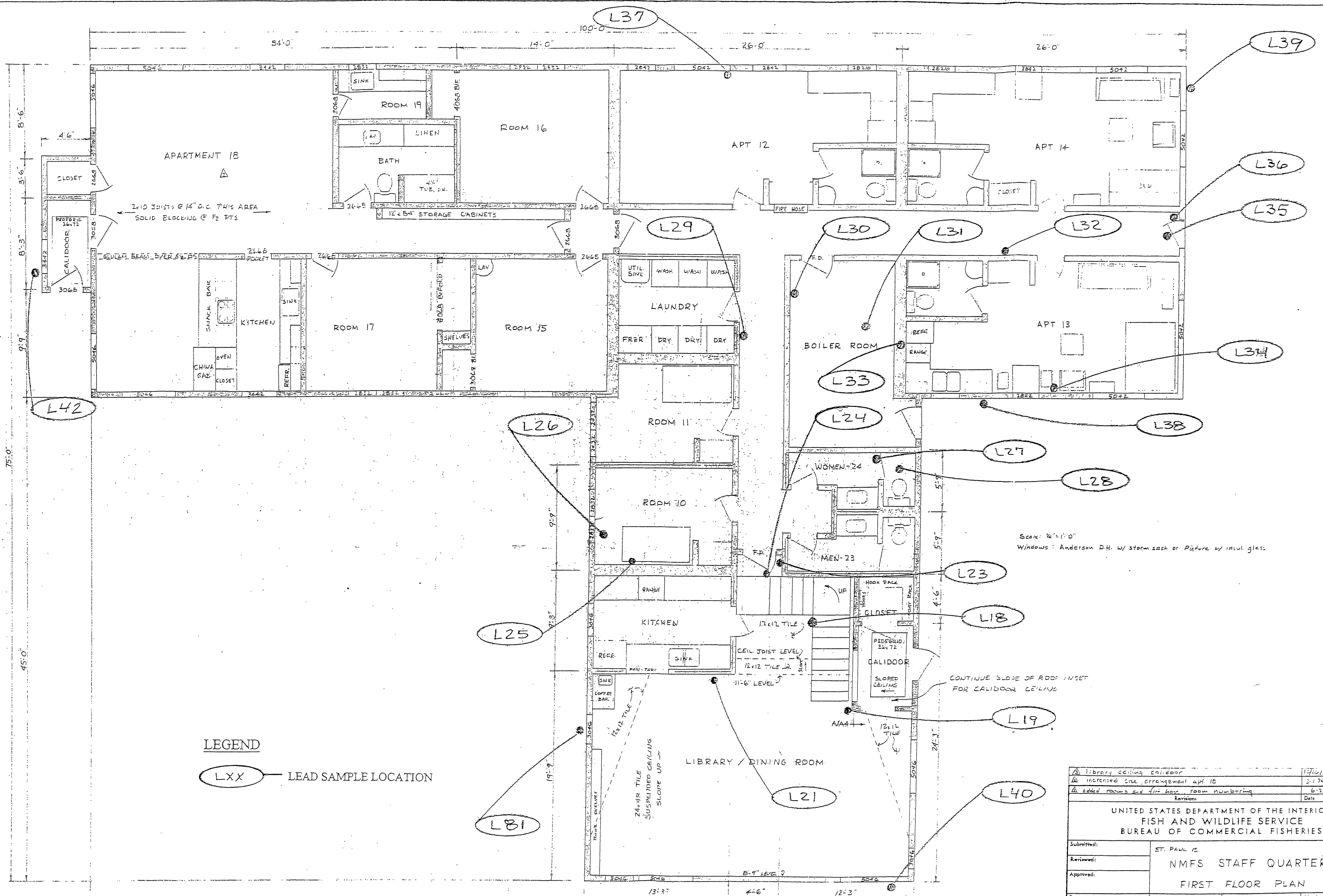
ROOM 27 CLOSET	12/24/74	RUF
CORRECTED APT NUMBERS	11/1/74	RUF
ADDED CALIBRATOR	2-12-74	RUF
Revisions	Date	By
UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE BUREAU OF COMMERCIAL FISHERIES		
Submitted:	ST. PAVL IS	ALASKA
Reviewed:	NMFS	STAFF QTRS
Approved:	SECOND FLOOR PLAN	
Date:	Designed: RUF	Drawn: Checked:



LEGEND

LXX — LEAD SAMPLE LOCATION

ROOM 27 CLOSET	12/24/74	RWF
CORRECTED APT NUMBERS	11/12/74	RWF
ADDED CALIBRATIONS	2-10-74	RWF
Revisions	Date	By
UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE BUREAU OF COMMERCIAL FISHERIES		
Submitted:	ST. PAUL IS ALASKA	
Reviewed:	NMFS STAFF QTRS	
Approved:	SECOND FLOOR PLAN	



HAZARDOUS MATERIALS REMOVAL COST SUMMARY			
PROJECT:		STAFF QUARTERS	
LOCATION:		St Paul Island, Alaska	
BASIC HAZARDOUS MATERIAL REMOVAL COSTS (Includes Labor):			
MATERIAL:			
ASBESTOS CONTAINING MATERIAL REMOVAL			\$91,000
OTHER HAZARDOUS MATERIALS REMOVAL			\$1,800
TOTAL REMOVAL COSTS:			\$92,800
BASIC SUPPORT COSTS:			
	QTY	UNIT	COST PER UNIT
PROJECT DESIGNER FEE:	1	EA @	\$500 LUMP
MEALS (7 pers.) FOR MOB/DEMOB DAYS:	2	DAYS @	\$350 DAY
MEALS (7 pers.) DURING PROJECT WORK:	10	DAYS @	\$350 DAY
RT AIRFARE TO SITE (7 pers.):	7	EA @	\$900 TICKET
TRAVEL DAY LABOR COSTS (6 pers. crew):	2	DAYS @	\$1,920 DAY
AIR MONITORING PERSON:	10	DAYS @	\$425 DAY
TRAVEL DAY LABOR COSTS (air mon. pers.):	2	DAYS @	\$425 DAY
SHIPPING OF SUPPLIES (to St Paul):	1	LOT	\$5,000 LUMP
TOTAL SUPPORT COSTS:			\$24,940
TOTAL BASIC COSTS:	(REMOVAL & SUPPORT)		\$117,740
LOCATION ADJUSTMENT:	INDEX =	1.10	\$129,514
CONTINGENCY:	PERCENT=	5	\$6,476
TOTAL BASIC COST ADJUSTED:			\$135,990
OTHER COSTS:			
INSURANCE	3.1	PCT	\$4,200
BONDING	3.0	PCT	\$4,100
OFFICE OVERHEAD	10.0	PCT	\$13,600
PROFIT	10.0	PCT	\$13,600
TOTAL OTHER COSTS:			\$35,500
TOTAL ESTIMATED REMOVAL & DISPOSAL COST :			\$171,490

NOTE: This is not a formal cost proposal. These costs are approximate, are based on general industry standards, and are based on information collected during the surveys, as well as information available at the time of preparation of this estimate. The removal costs will vary greatly depending on a number of factors, including the amount of material removed from each area (smaller amounts are not as cost efficient), whether one building or all three are done simultaneously, whether or not the local landfill is permitted to accept asbestos waste (etc.).

The following assumptions have been used in assigning a dollar amount to the asbestos removal subtotal:

- 1) 1 supervisor and 5 workers for each building; plus one air monitoring person
- 2) each building will be dealt with without regard to the other two buildings
- 3) one day travel each way to and from site for each person for each building
- 4) 10 work days each for staff quarters and clinic, 5 work days for lab building
- 5) Government to provide lodging for all personnel
- 6) Meal rate of \$50/day per individual for duration of project
- 7) asbestos waste allowed to be disposed of on St Paul Island

Estimate of costs for removal of miscellaneous hazardous items from three buildings on St Paul Island

Material	unit	Cost	Clinic		Staff qtrs		Lab admin	
			Quantity	extended price	Quantity	extended price	Quantity	extended price
PCB ballasts	EA	\$40	150	\$6,000	40	\$1,600	65	\$2,600
Mercury bulbs	EA	\$2.50	300	\$750	80	\$200	160	\$400
radioactive signs	EA	\$200	3	\$600		\$0		\$0
mercury thermostat	EA	\$125	8	\$1,000		\$0		\$0
emer lites w/batteries	EA	\$30	18	\$540		\$0		\$0
Subtotal ***				\$8,890		\$1,800		\$3,000

*** Removal/disposal costs for miscellaneous items includes all costs for removal/disposal (assuming personnel are already on site for asbestos removal).



Photo 1: Staff Quarters Building



Photo 2: Lower ceiling at back of photo has glued ceiling tiles; brown tile mastic was found to be asbestos containing, Sample A40.



Photo 3: Typical asbestos containing fire door (boiler room), Sample A18.
Photo also shows boiler equipment with assumed asbestos containing gaskets.



Photo 4: Typical asbestos containing cement shingles and roof tarpaper, Samples A43 and A44.



Photo 5: Typical asbestos containing tan ceramic tile mastic, Sample A15.

HAZARDOUS MATERIALS SURVEY

**For
NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
PRIBILOF FACILITIES
ST. PAUL, ALASKA**



LABORATORY ADMINISTRATION BUILDING

**FINAL REPORT
November 2003**

Prepared by:



**ENVIRONMENTAL &
INSTRUMENTATION
1611 East 1st Avenue
Anchorage, Alaska 99501**

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Table 1: ASBESTOS SAMPLE SUMMARY TABLE

APPENDIX A: FIELD AND LABORATORY DATA SHEETS
APPENDIX B: SAMPLE LOCATION FIGURES
APPENDIX C: COST ESTIMATE SUMMARY
APPENDIX D: PHOTO LOG

ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Materials
CFR	Code of Federal Regulations
EHS	EHS Alaska, Inc.
EPA	Environmental Protection Agency
IATL	International Asbestos Testing Laboratories
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NOAA	National Oceanic & Atmospheric Administration
NRC	Nuclear Regulatory Commission
NVLAP	National Voluntary Laboratory Accredited Program
OSHA	Occupational Safety and Health Administration
PCB	Poly-chlorinated Biphenyls
PLM	Polarized Light Microscopy
PSI	PSI Environmental & Instrumentation
TCLP	Toxic Characteristics Leachate Procedure
TEM	Transmission Electron Microscopy
XRF	X-Ray Fluorescence

1.0 INTRODUCTION

PSI Environmental & Instrumentation (PSI) was contracted by the National Oceanic & Atmospheric Administration (NOAA) to perform hazardous material surveys of several buildings on St. Paul and St George Islands, Alaska. Buildings on St. Paul Island include the NOAA Staff Quarters, the NOAA Laboratory Administration Building, the St. Paul Health Clinic Building, and an area of the lot behind the Staff Quarters Building, called Area 51. This report summarizes the survey performed at the Lab Admin Building. Drawings supplied by NOAA indicate that the building was built in approximately 1974. Samples were collected during the survey to fulfill the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for future renovation or demolition work. Sarah Kenshalo of PSI, accompanied by Brian Morgan of EHS-Alaska, Inc. (EHS) performed an inspection and collected samples from building materials on October 14 and 15, 2002.

2.0 SCOPE OF WORK

PSI personnel, accompanied by EHS personnel, inspected the building for the presence, extent, and condition of possible asbestos-containing materials (ACM), lead-based paint, leachable lead in building debris, mercury-containing items, polychlorinated biphenyls (PCB) ballasts in light fixtures and items containing radioactive compounds. The purpose of the inspection was to identify hazardous materials that may be disturbed during future renovation or demolition activities. Field and laboratory data sheets are included as Appendix A, building plans displaying sample locations are presented in Appendix B. A summary cost estimate has been prepared for the removal and disposal of identified hazardous wastes from this building, and is included as Appendix C. A photo log from the survey is included as Appendix D.

3.0 SAMPLING AND ANALYSIS

3.1 Asbestos-Containing Materials

Personnel performed an inspection of the project building and collected samples of materials suspected of containing asbestos from 32 locations. Mr. Morgan is a U.S. Environmental Protection Agency (EPA) certified building inspector. All samples were analyzed for the presence of asbestos by polarized light microscopy (PLM), the method of analysis recommended by the EPA to determine the composition of suspected asbestos-containing materials. International Asbestos Testing Laboratories (IATL), of Mt. Laurel, New Jersey analyzed samples for asbestos content. IATL is a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. Only materials containing more than 1% total asbestos were classified as "asbestos-containing" based on EPA criteria. Table 1 provides a summary list of all samples collected with results. Chain of Custody Record/Field Survey Data sheets and Laboratory reports are included in Appendix A. A floor plan showing location of samples collected is provided in Appendix B.

Samples Collected by EHS-Alaska, Inc. October 14-15, 2002

TABLE 1: ASBESTOS SAMPLING SUMMARY

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
LA1014-A01	12 x 12 floor tile, tan with brown streaks (FT-1)	Room 20, N wall	1.9% Chrysotile
LA1014-A02	FT-1	Room 19, S wall	None Detected
LA1014-A03	White sink undercoating	Room 20	None Detected
LA1014-A04	Joint compound	Room 19, S wall	None Detected
LA1014-A05	Black floor tile mastic	Corridor outside room 19	10% Chrysotile
LA1014-A06	Black sink undercoating	Room 26	Trace, < 1%
LA1014-A07	Black floor tile mastic	Room 18	10% Chrysotile
LA1014-A08	White sink undercoating	Room 17	1.5% Chrysotile
LA1014-A09	Black sink undercoating	Room 23, S wall	6.8% Chrysotile
LA1014-A10	Tan Marlite mastic	Room 23, W wall	None Detected
LA1014-A11	Pink sink undercoating	Room 23, N wall	1.2% Chrysotile
LA1014-A12	Joint compound	Room 22, ceiling	None Detected
LA1014-A13	Gypsum wallboard	Room 22, ceiling	None Detected
LA1014-A14	Brown cove base mastic	Corridor outside room 21	None Detected
LA1014-A15	Joint compound	Boiler room, E wall	None Detected
LA1014-A16	Rope gasket	Boiler, boiler room	85% Chrysotile
LA1014-A17	Pink sink undercoating	Room 15	1.3% Chrysotile
LA1014-A18	12x12 floor tile, marble pattern (FT-2)	Doorway to janitor's closet	4.7% Chrysotile
LA1014-A19	Pink sink undercoating	Room 14	1.5% Chrysotile
LA1014-A20	FT-2	Doorway to room 14	None Detected
LA1014-A21	Black mastic/tan mastic	Men's room, near S wall	None Detected
LA1014-A22	Joint compound	Room 9, E wall	None Detected
LA1014-A23	Gypsum wallboard	Room 9, E wall	None Detected
LA1014-A24	White carpet mastic	NE corner room 6	None Detected
LA1014-A25	Brown cove base mastic	NE corner room 6	None Detected
LA1014-A26	Gypsum wallboard	Attic, between rooms 4 and 15	None Detected
LA1014-A27	Roof tarpaper	Roof, SW corner	20% Chrysotile

TABLE 1: ASBESTOS SAMPLING SUMMARY

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
LA1014-A28	Cement shingle	Roof, SW corner	15% Chrysotile
LA1014-A29	Roof tarpaper	Roof, SE corner	20% Chrysotile
LA1014-A30	Cement shingle	Roof, SE corner	25% Chrysotile
LA1014-A31	Fiberboard	S exterior wall, beneath siding	None Detected
LA1014-A32	Gypsum wallboard	S exterior wall, beneath siding	None Detected
The testing method used (polarized light microscopy [PLM]) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation should be made by quantitative transmission electron microscopy (TEM).			

Floor Tile and Mastic (FT-1)

The 12" x 12" tan floor tile with brown streaks (FT-1), as well as the mastic associated with this tile were found to be asbestos-containing. These materials were located in the northern two-thirds of the facility. The material was in fair to good condition and was considered non-friable. There was approximately 1,000 square feet of this tile and mastic in the building.

Self Adhesive Floor Tile (FT-2)

The 12" x 12" marble pattern floor tile was found to be asbestos-containing. This material was self-adhesive and the adhesive was not found to contain asbestos. This material was located in the southern one-third of the building in the corridor, lab and restrooms. The material was in good condition and is considered non-friable. There was approximately 460 square feet of this material in the building.

Sink Undercoating

The sprayed-on undercoating on stainless steel sinks was found to be asbestos containing. The material was in good condition was considered non-friable. The material was encountered in white, pink and black. There were approximately 12 of these sinks throughout the facility.

Rope Boiler Gaskets

The rope boiler gaskets in the mechanical room ere found to be asbestos containing. The material was in good condition and was considered non-friable.

Roofing Tarpaper

The tarpaper beneath cement shingles on the roof of the facility was found to be

asbestos-containing. The material was in fair to good condition and was considered non-friable. There was approximately 4,250 square feet of this material on the building.

Cement Shingles

The cement shingles on the roof of the facility were found to be asbestos-containing. The material was in fair to good condition and was considered non-friable. This material covered approximately 4,250 square feet on the building. No attempt was made to increase the amount of material due to overlap.

Flange Gaskets, Boiler Gaskets and Valve Packings

Flange gaskets and packing on valves could not be sampled without disassembly, but were assumed to contain asbestos based on the age of the equipment.

Settled and Concealed Dusts

Workers should be made aware that the potential exists for encountering dusts containing asbestos.

3.2 Lead-Containing Materials

Lead Paint

EHS-Alaska tested paint in 30 locations throughout the building. Paint was tested using a NITON XL309 X-Ray Fluorescence (XRF) lead paint analyzer (Serial # U862NR0666 with software version 5.3). The instrument was operated in the "K & L + Spectra" mode. Prior to testing an instrument self-calibration test was performed and the instrument calibration was checked using a set of government traceable lead paint samples. Calibration was checked using known paint film samples containing 0.0 mg/ cm², 0.3 +/- 0.1 mg/ cm², 1.0 +/- 0.1 mg/ cm², 1.6 +/- 0.2 mg/ cm², and 3.5 +/- 0.3 mg/ cm² of lead. The instrument was calibrated and all calibration tests were successful. Calibration tests are indicated in the test results table with the word "calibration" in the room column. Sampling results are included in Appendix A. A drawing showing sample locations is included in Appendix B.

The EPA has determined that paints containing lead greater than 1 milligram per square centimeter (mg/cm²) are considered "lead based paints". Two painted surfaces were found to have paint with lead in excess of the 1.0 mg/ cm² threshold. These surfaces were on the painted fascia on the exterior of the building.

Although there is no requirement to remove lead-based or lead-containing paints from this building, any loose or peeling paint should be removed to prevent potential lead dust exposure to construction personnel during demolition. Additionally, wherever torch cutting or welding are to take place, paint should be removed from the heat-affected area.

The U.S. Occupational Safety and Health Administration (OSHA) does not recognize a lower limit to the quantity of lead present in paint for their standard, 29 CFR 1926.62, to be in effect. However, lead in paint at the levels found can expose

construction/demolition workers to lead levels in excess of the permissible exposure limits set by the OSHA standard if proper work controls and protective equipment are not used during renovation.

Solder on Piping and Tubing

Depending on the age of the piping and tubing, soldered joints typically contain metallic lead.

Settled and Concealed Dusts

Workers should be made aware that the potential exists for encountering dusts containing lead.

Leachable Lead

Personnel performed a survey of the building and collected a composite sample of representative materials for leachable lead analysis. Sampling was performed using the guidelines set forth in the United States Army Environmental Hygiene Agency's *Sampling Protocol – Building Demolition Debris and Buildings Painted with Lead-Based Paint*. This composite sample was analyzed for leachable lead content by means of Toxicity Characteristic Leaching Procedure (TCLP). The composite sample was analyzed by EMSL Analytical, Westmont, New Jersey. The result of this composite sample analysis shows a concentration of <0.4 mg/L of lead, well below the allowable 5 mg/L as established by the EPA. This result indicates that the waste stream of this building would be considered non-hazardous waste with respect to lead. The Chain of Custody Record/Field Survey Data sheets with results are included in Appendix A.

3.3 PCB -Containing Materials

Fluorescent light fixtures were inspected at random for the presence of polychlorinated biphenyl (PCB) containing ballasts. Unless ballasts were specifically labeled "No PCBs", they were assumed to contain PCBs. Approximately 65 PCB-containing ballasts were identified.

3.4 Mercury-Containing Materials

Fluorescent light fixtures were present throughout the project area. Due to their age, all fluorescent lamps were assumed to contain mercury. Prior to disposal, these should be analyzed for leachable mercury content by means of TCLP. This test will determine whether they are suitable for disposal in a landfill or whether they should be treated as hazardous waste when disposed of. There were approximately 160 of these bulbs in the facility.

4.0 REGULATORY CONSTRAINTS

4.1 Asbestos-Containing Materials

The EPA regulations issued as Title 40 of the Code of Federal Regulations, Part 61 (40 CFR 61) under the National Emission Standards for Hazardous Air Pollutants (NESHAP), established procedures for handling ACM during asbestos removal and waste disposal. These regulations require an owner (or the owner's contractor) to notify the EPA of asbestos removal operations and to establish responsibility for the removal, transportation, and disposal of asbestos. The disposal of asbestos waste is regulated by the EPA, the State of Alaska Department of Environmental Conservation, and the disposal site operator. OSHA regulation 29 CFR 1926.1101 requires air monitoring during ACM removal and during demolition to determine the airborne concentrations of asbestos to which workers may be exposed. 29 CFR 1926.1101 also establishes permissible exposure limits, respiratory protection and protective clothing requirements, and establishes standard work practices and engineering controls for asbestos removal. All federal, state and local standards regulating asbestos should be followed during renovations of this building.

4.2 Lead-Containing Materials

Federal OSHA requirements (29 CFR 1926.62), and the Alaska Administrative Code (AAC) (8 AAC Chapter 61) have promulgated or adopted regulations that apply to all construction work where employees may be exposed to lead. Due to the presence of lead-containing paint in and on the surfaces to be renovated, the renovation contractor is required to monitor his/her workers to determine if they will be exposed to lead at or above the action level established in the regulation. Until this "initial determination" establishes that workers are not exposed above the permissible exposure limit, the contractor is required to provide worker and site protection procedures. Continued air and medical monitoring may be required if exposure is above the action level.

The EPA requires that actual construction or demolition debris that contains lead or lead-containing paint be tested using the TCLP procedure to determine if the waste must be treated as hazardous waste. In order to classify the lead wastes as hazardous or non-hazardous for disposal purposes, TCLP tests are required by the EPA. The TCLP test determines the leachability of lead from the paint and substrate. Currently, the allowable leachate of lead in order to be classified as a non-hazardous waste is 5 milligrams of lead per liter of leachate (mg/l) or less. Anything above this 5 mg/l level is classified as hazardous waste and must be disposed of in the "lower 48" at an approved permitted Transportation, Storage, and Disposal facility. All federal, state and local standards regulating lead and lead-containing wastes should be followed during the demolition of this building.

4.3 PCB-Containing Materials

Products that contain PCBs at 50 ppm or greater are regulated by the EPA. The EPA has promulgated regulations (40 CFR Part 761) that cover the proper handling and disposal of PCB-containing materials. Workers who remove or handle PCB-containing or PCB-contaminated materials or who transport or dispose of PCB wastes must be trained and certified in hazardous waste operations and emergency response (HAZWOPER) as required by 29 CFR 1910.120 and the State of Alaska Department of Labor (8 AAC 61). The Department of Transportation under 49 CFR Parts 100-199 regulates the marking, packaging, handling and transportation of hazardous materials.

All federal, state and local standards regulating PCBs should be followed during the demolition of this building.

4.4 Mercury-Containing Materials

Building waste materials containing mercury or mercury compounds are considered hazardous waste if the mercury levels, as determined by a TCLP test of the waste, exceed 0.2 milligrams per liter (0.2 mg/l). The EPA has promulgated regulations (40 CFR Parts 261, 262, and 263) that cover the proper characterization, handling, transportation and disposal of hazardous waste. Workers who remove or handle hazardous waste and transport or dispose of hazardous wastes must be trained and certified in HAZWOPER as required 29 CFR 1910.120 and the State of Alaska Department of Labor (8 AAC 61). The Department of Transportation under 49 CFR Parts 100-199 regulates the marking, packaging, handling and transportation of hazardous materials. All federal, state and local standards regulating mercury should be followed during the renovation of this building.

APPENDIX A

Bulk Asbestos and TCLP Field Data Sheets, Laboratory Reports and XRF Data

APPENDIX B

Sketches of Sample Locations

APPENDIX C

Abatement Cost Summary

APPENDIX D

Photo Log

APPENDIX A

Bulk Asbestos and TCLP Field Data Sheets, Laboratory Reports and XRF Data



EHS ALASKA
INCORPORATED

EHS-ALASKA, LLC.

10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052
(907) 694-1383 • (907) 694-1382 fax
e-mail • ehsak@ehs-alaska.com

CHAIN OF CUSTODY RECORD/FIELD SURVEY DATA				Page 1 of 3
FIELD COLLECTION DATE: -10-15-02		JOB #: 5766-01		MATERIAL TYPE:(Circle) ASBESTOS LEAD
PROJECT NAME: NOAA Pribilofs Survey.		BULK ANALYSIS REQUESTED: <input checked="" type="checkbox"/> PLM <input type="checkbox"/> PLM DUST <input type="checkbox"/> TEM BULK <input type="checkbox"/> LEAD TCLP <input type="checkbox"/> LEAD PPM		
FACILITY: Laboratory/Admin Building		DISPOSAL: Normal		TURNAROUND: 5 Day
SPECIAL INSTRUCTIONS:				
COLLECTED BY (Signature) Brian Morgan PRINTED NAME T-7577-8 CERT# AHERAF Fed Ex SHIPPING METHOD 83689378524 COURIER (signature) DATE/TIME 10/17/02		IATL SELECTED LABORATORY SAMPLES ACCEPTED BY DATE/TIME 10/18/02 ANALYST'S SIGNATURE DATE COMMENTS: 1/2 10/25/02		
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, TRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/REF)	RESULTS	
LA1014-A01 1598849	12 x 12 floor tile, tan with brown streaks (FT-1)	Room 20, N wall	1.9% C	
LA1014-A02 1598850	FT-1	Room 19, S wall	ND	
LA1014-A03 1598851	White sink undercoating	Room 20	ND	
LA1014-A04 1598852	Joint compound	Room 19, S wall	ND	
LA1014-A05 1598853	Black floor tile mastic	Corridor outside room 19	10% C	
LA1014-A06 1598854	Black sink undercoating	Room 26	21% C	
LA1014-A07 1598855	Black floor tile mastic	Room 18	10% C	
LA1014-A08 1598856	White sink undercoating	Room 17	1.5% C	
LA1014-A09 1598857	Black sink undercoating	Room 23, S wall	6.8% C	
LA1014-A10 1598858	Tan Marlite mastic	Room 23, W wall	ND	
LA1014-A11 1598859	Pink sink undercoating	Room 23, N wall	1.2% C	

RETURN A SIGNED COPY OF THIS FORM WITH THE FINAL REPORT TO EHS-ALASKA HS-975



EHS ALASKA
INCORPORATED

EHS-Alaska, Inc.

Environmental Health Sciences-Alaska, Inc.

10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052

(907) 694-1383 • (907) 694-1382 fax

NO. 717 1. 00

FIELD SURVEY DATA (continued)

Page 2 of 3

PROJECT NAME: NOAA Pribilofs Survey		FACILITY: Laboratory/Admin Building	
JOB NUMBER: 5766-01		DATE: 10-15-02	COLLECTED BY: Brian Morgan
SAMPLE ID	SAMPLE DESCRIPTION (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/REF)	RESULTS
LA1014-A12 1598860	Joint compound	Room 22, ceiling	ND
LA1014-A13 1598861	Gypsum wallboard	Room 22, ceiling	ND
LA1014-A14 1598862	Brown cove base mastic	Corridor outside room 21	ND
LA1014-A15 1598863	Joint compound	Boiler room, E wall	ND
LA1014-A16 1598864	Rope gasket	Boiler, boiler room	85%cc
LA1014-A17 1598865	Pink sink undercoating	Room 15	103%cc
LA1014-A18 1598866	12x12 floor tile, marble pattern (FT-2)	Doorway to janitor's closet	40%cc
LA1014-A19 1598867	Pink sink undercoating	Room 14	105%cc
LA1014-A20 1598868	FT-2	Doorway to room 14	ND
LA1014-A21 1598869	Black mastic/tan mastic	Men's room, near S wall	ND
LA1014-A22 1598870	Joint compound	Room 9, E wall	ND
LA1014-A23 1598871	Gypsum wallboard	Room 9, E wall	ND
LA1014-A24 1598872	White carpet mastic	NE corner room 6	ND
LA1014-A25 1598873	Brown cove base mastic	NE corner room 6	ND
LA1014-A26 1598874	Gypsum wallboard	Attic, between rooms 4 and 15	ND
LA1014-A27 1598875	Roof tarpaper	Roof, SW corner	20%cc



NO. 917 P. 30

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Page 3 of 3

[illegible]

Client: EHS Date: 10/25/14 Analyst: JA age 01

Project: 5766 01 Special Instructions: RTP Reviewed By / Date: PC Data / Detailed Notes on Reverse

IATL Bulk Analysis Data Sheet

Client # IATL#	Quantify (VAP%) Asbestos Type %	Point Count Data	Non-Asbestos Fibers & %	Gross Sample Appearance Layer Color Monog	Optical Characteristics RI Morpho Oil	CSDS
LA 1014A 09 1598 857	Curv 6.8	4155 45678	—	93.2 No	Sink Unaltered No	1047
10 858	ND	1 45678	—	Y T	M	—
11 859	Curv 1.2	4137 45678	—	98.8 Y	Sink Unaltered No	1047
12 860	ND	1 45678	—	Y T	JC	—
13 861	ND	1 45678	Cell 72.2	Y BA	PL	—
14 862	ND	1 45678	—	Y BA	M	—
15 863	ND	1 45678	—	Y T	JC	—
16 864	Curv 85	1 45678	Cell 10	Y 9	J	1047

COMMENTS: * Shell amt of material

1 (UC) Point Count via ELAP 198.1, record asbestos points (AP), non-empty points (NE), and slide mounts. See chart and PC Data Calc.
 3 Use RI Values and Temp (SC Sm96)
 4 Report clear observations on layered materials, including SRJC/Comp, FTM, absent layers, insufficient layers, and other valuable descriptions.

Client: EHS Date: 10/25/00 Analyst: JH Page 1 of 1

Project: 5766 01

Special Instructions: _____ RTP: _____

Reviewed By / Date: _____

QC Review: _____

PC Data / Detailed Notes on Reverse: _____

IATL: Bulk Analysis Data Sheet

U.S. D. ZPM												
Client #	Quantity (VAE%) Asbestos Type%	Point Count Data	Non-Asbestos Fibers & %	Fiber Count Data	Cross Sample Appearance		Optical Characteristics				CSDS	
					Layers	Color	Texture	Oil	Micro	Pico		Filter
LA 10117 7558 865	1.3 CWV	Y 1/20 45678	—	28.7	Y	P	Sink	Unlabeled	W	N	—	20
LA 10118 7558 866	4.7 CWV	Y 1/25 45678	—	28.3	Y	T	—	—	W	N	—	20
LA 10119 7558 867	1.5 CWV	Y 1/25 45678	—	28.1	Y	P	Sink	Sink/unlabeled	W	N	—	20
LA 10120 7558 868	N	Y 1/20 45678	—	100	N	T/Lg	SF	—	W	N	—	20
LA 10121 7558 869	N	Y 1/20 45678	—	100	N	T/Lg	M/Perm	—	W	N	—	20
LA 10122 7558 870	N	Y 1/20 45678	—	100	Y	T	JC	—	W	N	—	20
LA 10123 7558 871	N	Y 1/20 45678	Cell Trace	100	Y	W	—	—	W	N	—	20
LA 10124 7558 872	N	Y 1/20 45678	—	100	Y	LT	M	—	W	N	—	20

COMMENT'S:-

* TAM - in w/ Dick from

NO. 917

1 (U/C) Point Count via ELAP 198-1, record asbestos points (AP), non-empty points (NE), and slide mounts. See chart and PC Data Calc. 2 Provide at least one optical property for non-asbestos fiber
3 (Use RL Values and Tentup (SC Su96) 4 Report clear observations on layered materials, including SRO/Comp, FT/M, absent layers, insufficient layers, and other valuable descriptions.

1 (UIC) Point Count via ELAP 198.1, record asbestos points (AP), non-empty points (NE), and slide mounts. See chart and PC Data Calc. 2 Provide at least one epifluorescent filter
3 (use RL Values and Tenip (SC Su596) 4 Report clear observations on layered materials, including SRA/Comp, FTM, absent layers, insufficient layers, and other valuable descriptions.

Client: EHS Date: 20/15/20 Analyst: JH

Project: S766 01 Special Instructions: RTP: Reviewed By / Date:

QC Review: PC Data / Detailed Notes on Reverse:

IATL Bulk Analysis Data Sheet

Client #	Quantity (VAE%)	Point Count Data	Non-Asbestos Fibers & %	Min. %	Gross Sample Appearance	Optical Characteristics	CSDS
IATLA	Asbestos Type %				Layers / Color / Homogeneity	R.I. / Morphology / Oil	Ex. #
LA 1014A 25	ND	1 / 45678	—	100	Y BL M	✓	
1598 873	ND	1 / 45678	Glass Trace cell Trace	100	Y BL PL	✓	
28	CLAY 20	1 / 45678	cell 20	60	(T.P) BL		
28	CLAY 15	1 / 45678	—	85	Y G TR	1/10 W N L P	147 A
29	CLAY 20	1 / 45678	cell 15	65	N BL T.P	1/10 W N L P	147 B
30	CLAY 25	1 / 45678	—	75	Y G TR	1/10 W N L P	147 C
31	ND	1 / 45678	cell 95	5	Y BL F	1/10 W N L P	
32	ND	1 / 45678	cell Trace	100	Y BL PL	1/10 W N L P	

COMMENTS:

- 1 (1/C) Point Count via ELAP 198.1, record asbestos points (AP), non-empty points (NE), and slide mounts. See chart and PC Data Calc.
- 2 Provide at least one optical property for non-asbestos fib.
- 3 Use RI Values and Temp (SC 50/96)
- 4 Report clear observations on layered materials, including SR/ICComp, FTIR, absent layers, insufficient layers, and other valuable descriptions.

NO. 917

IATL International Asbestos
Testing Laboratories

16000 Horizon Way Unit 100 Mt. Laurel, NJ 08054

Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577**Report Date:** 10/25/2002
Project: NOAA Pribilofs Survey; Lab/Admin
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598849	Material Description:	Tan Floor Tile		
Client No.:	LA1014-A01	Location:	Room 20; N.Wall	12x12 (FT-1)	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 1.9	Chrysotile	None Detected	None Detected	PC 98.1	

Lab No.	1598850	Material Description:	White Plaster		
Client No.:	LA1014-A02	Location:	Room 19; S.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	Trace	Cellulose	100	
		Trace	Fibrous Glass		

Lab No.	1598851	Material Description:	Off-White NonFibrous		
Client No.:	LA1014-A03	Location:	Sink Undercoating	Room 20	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598852	Material Description:	Tan Joint Compound		
Client No.:	LA1014-A04	Location:	Room 19; S.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*

Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.

Analysis Performed By: _____

Approved By: _____

Date: _____

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs Survey, Lab/Admin
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598853	Material Description:	Black Mastic	
Client No.:	LA1014-A05	Location:	Corridor/Outside Rm. 19 A/W Floor Tile	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
10	Chrysotile	None Detected	None Detected	90

Lab No.	1598854	Material Description:	Black Sink Undercoat	
Client No.:	LA1014-A06	Location:	Room 26	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 0.25	Chrysotile	None Detected	None Detected	PC 99.75

Lab No.	1598855	Material Description:	Black Mastic	
Client No.:	LA1014-A07	Location:	Room 18 A/W Floor Tile	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
10	Chrysotile	None Detected	None Detected	90

Lab No.	1598856	Material Description:	Pink Sink Undercoat	
Client No.:	LA1014-A08	Location:	Room 17	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.5	Chrysotile	None Detected	None Detected	PC 98.5

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444**

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government

Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM

Analysis Performed By: _____**Approved By:** _____**Date:** _____Frank E. Ehrenfeld, III
Laboratory Director

IATL International Asbestos
Testing Laboratories

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Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs Survey; Lab/Admin
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No. 1598857	Material Description: Black/Silver
Client No.: LA1014-A09	Location: Sink Undercoat Room 23; S.Wall
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
PC 6.8	None Detected
<u>Type</u>	<u>Type</u>
Chrysotile	None Detected
	<u>% Non-Fibrous Material</u>
	PC 93.2

Lab No. 1598858	Material Description: Tan Mastic
Client No.: LA1014-A10	Location: Room 23; W.Wall
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
None Detected	None Detected
<u>Type</u>	<u>Type</u>
None Detected	None Detected
	<u>% Non-Fibrous Material</u>
	100

Lab No. 1598859	Material Description: Pink Sink Undercoat
Client No.: LA1014-A11	Location: Room 23; N.Wall
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
PC 1.2	None Detected
<u>Type</u>	<u>Type</u>
Chrysotile	None Detected
	<u>% Non-Fibrous Material</u>
	PC 98.8

Lab No. 1598860	Material Description: Tan Joint Compound
Client No.: LA1014-A12	Location: Room 22; Ceiling
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
None Detected	None Detected
<u>Type</u>	<u>Type</u>
None Detected	None Detected
	<u>% Non-Fibrous Material</u>
	100

NIST-NVLAP No. 1165

NY-DOH No. 11021

AIHA Lab No. 444

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.

Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.

Analysis Performed By: _____

Approved By: _____

Date: _____

Frank E. Ehrenfeld, III
Laboratory Director

IATL International Asbestos
Testing Laboratories

16000 Horizon Way Unit 100 Mt. Laurel, NJ 08054

Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs Survey; Lab/Admin
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598861	Material Description:	Brown Plaster	
Client No.:	LA1014-A13	Location:	Room 22; Ceiling	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Cellulose	100

Lab No.	1598862	Material Description:	Brown Covebase Mastic	
Client No.:	LA1014-A14	Location:	Corridor Outside Room 21	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.	1598863	Material Description:	Tan Joint Compound	
Client No.:	LA1014-A15	Location:	Boiler Room; E. Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.	1598864	Material Description:	Grey Insulation	
Client No.:	LA1014-A16	Location:	Rope Gasket Boiler; Boiler Room	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
85	Chrysotile	10	Cellulose	5

NIST-NVLAP No. 1165

NY-DOH No. 11021

AIHA Lab No. 444

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Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Suritized Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by qualitative TEM.

Analysis Performed By: _____

Approved By: _____

Date: _____

 Frank B. Ehrenfeld, III
Laboratory Director

IATL International Asbestos
Testing Laboratories

16000 Horizon Way Unit 100 Mt. Laurel, NJ 08054

Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs Survey; Lab/Admin
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No. 1598865	Material Description: Pink Sink Undercoat
Client No.: LA1014-A17	Location: Room 15
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
PC 1.3	None Detected
<u>Type</u>	<u>Type</u>
Chrysotile	None Detected
	<u>% Non-Fibrous Material</u>
	PC 98.7

Lab No. 1598866	Material Description: Tan Floor Tile
Client No.: LA1014-A18	Location: Doorway To Janitor's Closet; 12x12 (FT-2)
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
PC 4.7	None Detected
<u>Type</u>	<u>Type</u>
Chrysotile	None Detected
	<u>% Non-Fibrous Material</u>
	PC 95.3

No Mastic

Lab No. 1598867	Material Description: Pink Sink Undercoat
Client No.: LA1014-A19	Location: Room 14
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
PC 1.5	None Detected
<u>Type</u>	<u>Type</u>
Chrysotile	None Detected
	<u>% Non-Fibrous Material</u>
	PC 98.5

Lab No. 1598868	Material Description: Tan/Grey
Client No.: LA1014-A20	Location: Vinyl Sheet Flooring Doorway To Room 14
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
None Detected	None Detected
<u>Type</u>	<u>Type</u>
None Detected	None Detected
	<u>% Non-Fibrous Material</u>
	100

Insufficient Mastic

NIST-NVLAP No. 1165

NY-DOH No. 11021

AIHA Lab No. 444

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Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.

Analysis Performed By: _____

Approved By: _____

Date: _____

Frank E. Ehrenfeld, III
Laboratory Director

IATL International Asbestos
Testing Laboratories

16000 Horizon Way Unit 100 Mt. Laurel, NJ 08054

Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs Survey, Lab/Admin
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598869	Material Description:	Tan/BlackMastic/Foam		
Client No.:	LA1014-A21	Location:	Men's Room	Near S. Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598870	Material Description:	Tan Joint Compound		
Client No.:	LA1014-A22	Location:	Room 9; E. Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598871	Material Description:	White Plaster		
Client No.:	LA1014-A23	Location:	Room 9; E. Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	Trace	Cellulose	100	

Lab No.	1598872	Material Description:	Lt. Tan Carpet Mastic		
Client No.:	LA1014-A24	Location:	N.E. Corner Room 6		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

NIST-NVLAP No. 1165

NY-DOH No. 11021

AIHA Lab No. 444

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Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.

Analysis Performed By: _____

Approved By: _____

Date: _____

 Frank E. Ehrenfeld, III
Laboratory Director

IATL International Asbestos
Testing Laboratories

16000 Horizon Way Unit 100 Mt. Laurel, NJ 08054

Telephone: 856-231-9449 FAX: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs Survey; Lab/Admin
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598873	Material Description:	Brown Covebase Mastic		
Client No.:	LA1014-A25	Location:	N.E. Corner Room 6		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598874	Material Description:	Brown Plaster		
Client No.:	LA1014-A26	Location:	Attic; Between Rooms 4 & 15		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	Trace	Cellulose	100	
		Trace	Fibrous Glass		

Lab No.	1598875	Material Description:	Black Tar Paper		
Client No.:	LA1014-A27	Location:	Roof; S.W. Corner		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
20	Chrysotile	20	Cellulose	60	

Lab No.	1598876	Material Description:	Grey Transite		
Client No.:	LA1014-A28	Location:	Roof; S.W. Corner		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
15	Chrysotile	None Detected	None Detected	85	

NIST-NVLAP No. 1165

NY-DOH No. 11021

AIHA Lab No. 444

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Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.

Analysis Performed By: _____

Approved By: _____

Date: _____

Frank E. Ehrenfeld, III
Laboratory Director

IATL International Asbestos
Testing Laboratories

16000 Horizon Way Unit 100 Mt. Laurel, NJ 08054

Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs Survey, Lab/Admin
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No. 1598877	Material Description: Black Tar Paper
Client No.: LA1014-A29	Location: Roof, S.E. Corner
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
20	15
<u>Type</u>	<u>Type</u>
Chrysotile	Cellulose
	<u>% Non-Fibrous Material</u>
	65

Lab No. 1598878	Material Description: Grey Transit
Client No.: LA1014-A30	Location: Roof, S.E. Corner
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
25	None Detected
<u>Type</u>	<u>Type</u>
Chrysotile	None Detected
	<u>% Non-Fibrous Material</u>
	75

Lab No. 1598879	Material Description: Brown Fibrous
Client No.: LA1014-A31	Location: S. Exterior Wall Beneath Siding
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
None Detected	95
<u>Type</u>	<u>Type</u>
None Detected	Cellulose
	<u>% Non-Fibrous Material</u>
	5

Lab No. 1598880	Material Description: Brown Plaster
Client No.: LA1014-A32	Location: S. Exterior Wall Beneath Siding
<u>% Asbestos</u>	<u>% Non-Asbestos Fibrous Material</u>
None Detected	Trace
<u>Type</u>	<u>Type</u>
None Detected	Cellulose
	<u>% Non-Fibrous Material</u>
	100

NIST-NVLAP No. 1165

NY-DOH No. 11021

AIHA Lab No. 444

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Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicator Stratified Point Count Method performed. Method not performed unless noted. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.

Analysis Performed By: _____

Approved By: _____

Date: _____

Frank E. Ehrenfeld, III
Laboratory Director

EMSL Analytical

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: 8568589551 Email: gmiller1@emsl.com

EMSL

Attn: Brian L. Morgan
Environmental Health Sciences-Alaska,
10928 Eagle River Road
Suite 202
Eagle River, AK 99577-8052

Customer ID: ENV104
Customer PO:
Received: 10/18/02 12:25 PM

Fax: (907) 694-1382 Phone: 907-694-1383

EMSL Order: 200210315

Project: NOAA Pribilof's Survey/ Laboratory/Admin Bldg/ # 5766-01

EMSL Project ID:

Toxicity Characteristic Leaching Procedure (SW846, 1311/7420)

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Analyzed</i>	<i>Lead Concentration</i>	<i>Notes</i>
Labad-tclp1	0001		<0.4 mg/L	



Gerold J. Miller, Ph.D.
Laboratory Director
NJ-NELAP: 04653
AIHA: 100194
or other approved signatory

CHAIN OF CUSTODY RECORD/FIELD SURVEY DATA

Page 1 of 1[illegible]

Lead Paint Screening Lab Admin Building

No	Site	Inspector	Room	Structure	Substrate	Feature	Condition	Color	Ssec	Date/Time	Depth Index	Results LBP	Results mg/cm ²
44	Lab Admin	Morgan	Shutter Cal	1					60.5	10/14/02 16:38	0 ...	NA	
45	Lab Admin	Morgan	Calibrate						13.9	10/14/02 16:39	8.8 INCOM		0.15
46	Lab Admin	Morgan	Calibrate						3.1	10/14/02 16:39	1.1 NEG		0.36
47	Lab Admin	Morgan	Calibrate						26.8	10/14/02 16:39	1.1 POS		1.1
48	Lab Admin	Morgan	Calibrate						11.2	10/14/02 16:40	1.1 POS		1.58
49	Lab Admin	Morgan	Calibrate						10.7	10/14/02 16:41	1.2 POS		3.76
50	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	10.2	10/14/02 16:44	1 NEG		0
51	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	7.9	10/14/02 16:44	1 NEG		0
52	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	12.5	10/14/02 16:45	1 NEG		0.01
53	Lab Admin	Morgan	Room	Door	Wood	Door	Intact	Brown	3.1	10/14/02 16:45	1 NEG		0.02
54	Lab Admin	Morgan	Room	Door	Wood	Door	Intact	Brown	3.1	10/14/02 16:46	1 NEG		0
55	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	7.9	10/14/02 16:46	1 NEG		0.01
56	Lab Admin	Morgan	Room	Wall	Metal	Radiator	Intact	White	3.2	10/14/02 16:47	1 NEG		0.03
57	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	10.2	10/14/02 16:54	1 NEG		0.02
58	Lab Admin	Morgan	Room	Door	Metal	Door	Intact	Brown	5	10/14/02 16:55	1.2 NEG		0.12
59	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	7.9	10/14/02 16:55	1.1 NEG		0.03
60	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	5.5	10/14/02 16:56	1 NEG		0.01
61	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	5.5	10/14/02 16:56	1 NEG		0
62	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	10.2	10/14/02 16:56	1 NEG		0
63	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	10.2	10/14/02 16:59	1 NEG		0.01
64	Lab Admin	Morgan	Room	Ceiling	Drywall		Intact	White	10.2	10/14/02 16:59	1.8 NEG		0.05
65	Lab Admin	Morgan	Room	Ceiling	Drywall		Intact	White	7.9	10/14/02 17:00	1 NEG		0
66	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	5.6	10/14/02 17:01	1 NEG		0
67	Lab Admin	Morgan	Room	Door	Wood	Door	Intact	Brown	3.1	10/14/02 17:01	1 NEG		0.01
68	Lab Admin	Morgan	Room	Door	Metal	Casing	Intact	Grey	6.1	10/14/02 17:02	1.2 NEG		0.02
69	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	5.6	10/14/02 17:03	1 NEG		0
70	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	10.2	10/14/02 17:09	1 NEG		0
71	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	19.5	10/14/02 17:09	5.9 NEG		-0.08
72	Lab Admin	Morgan	Room	Wall	Drywall		Intact	White	5.6	10/14/02 17:10	1 NEG		0
73	Lab Admin	Morgan	Room	Wall	Vinyl		Intact	Green	12.6	10/14/02 17:11	1 NEG		-0.57
74	Lab Admin	Morgan	Room	Wall	Vinyl		Intact	Green	15	10/14/02 17:12	1 NEG		-0.14
75	Lab Admin	Morgan	Room	Wall	Vinyl		Intact	Green	10.3	10/14/02 17:12	1 NEG		-0.61
76	Lab Admin	Morgan	Room	Wall	Vinyl		Intact	Green	22	10/14/02 17:14	1 NEG		0
77	Lab Admin	Morgan	Room	Door	Metal	Door	Intact	Brown	4.8	10/14/02 17:15	1.6 NEG		0.07
78	Lab Admin	Morgan	Outside	0 Ext Trim	Wood	Fascia	Intact	White	9.3	10/14/02 17:20	2.3 POS		2.95
79	Lab Admin	Morgan	Outside	0 Ext Trim	Wood	Fascia	Intact	White	7.2	10/14/02 17:21	2.8 POS		5.7

No	Site	Inspector	Room	Structure	Substrate	Feature	Condition	Color	Ssec	Date/Time	Depth Index	Results LBP	Results mg/cm ²
82	Lab Admin	Morgan	Calibrate						3.1	10/14/02 17:25	3.4	NEG	0.05
83	Lab Admin	Morgan	Calibrate						21.7	10/14/02 17:26	1.1	POS	1.12
84	Lab Admin	Morgan	Calibrate						4.6	10/14/02 17:26	1.1	POS	3.57

Table Heading Descriptions:

Ssec:

This is the nominal time in seconds that each sample was analyzed.

Depth Index:

Indicates the relative depth of the lead. A Depth Index (DI) of less than 1.5 indicates lead very near the surface layer of paint. A DI between 1.5 and 4.0 indicates moderately covered lead. A DI greater than 4.0 indicates the lead paint is deeply buried beneath multiple layers of paint.

LBP:

Results are shown as positive (POS ≥ 1.0 mg/cm²), inconclusive (INC) or negative (NEG < 1.0 mg/cm²). The results are based on the combined results of the K and L shell readings. L shell and K shell readings are not provided. Positive results are also in bold print.

mg/cm²:

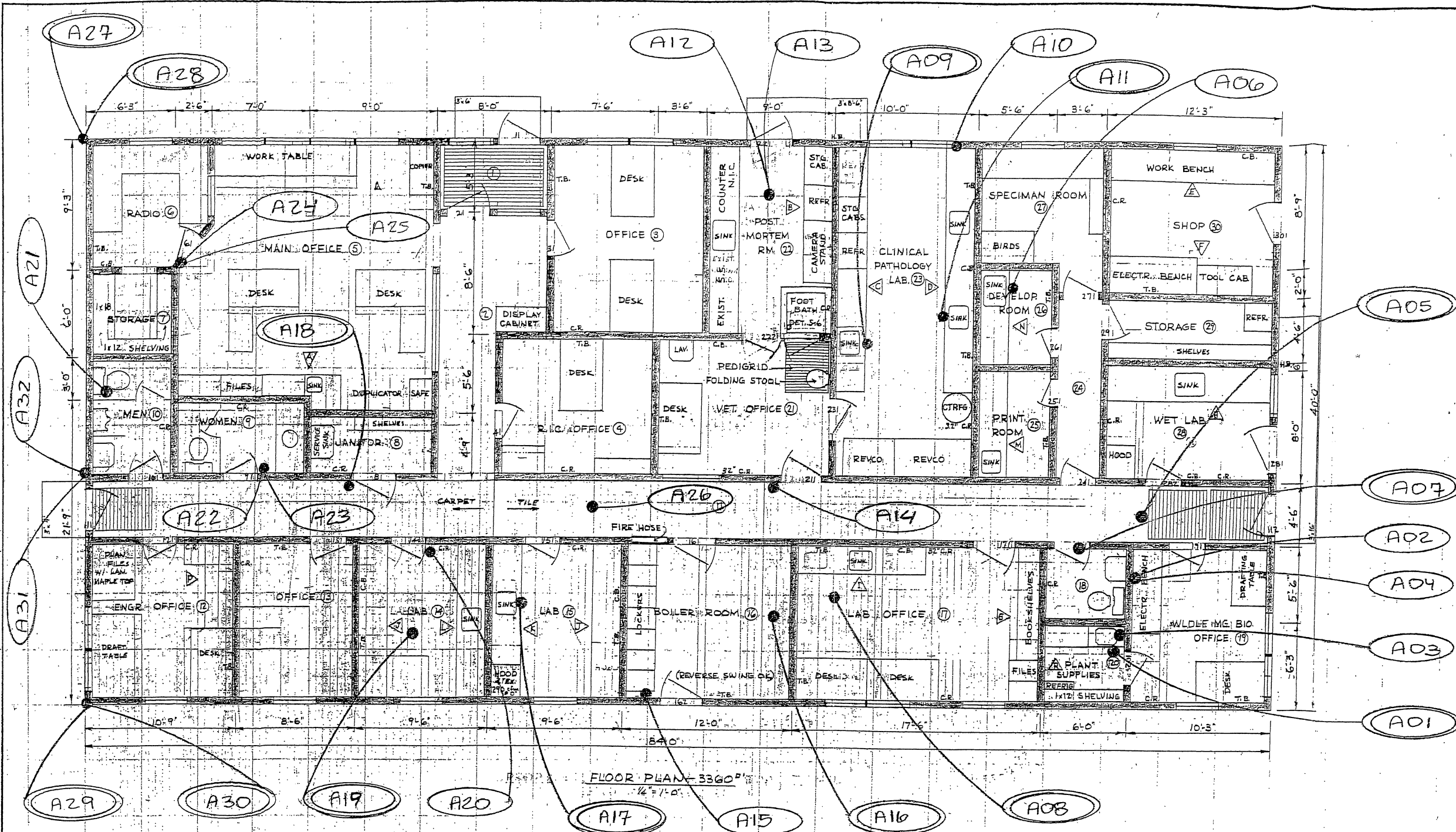
This is the testing results produced by the NITON XL-309 instrument in milligrams of lead per square centimeter (mg/cm²). The EPA defines lead based paint as paint containing lead at 1.0 mg/cm² or greater. A negative number is a result of an internal computation made by the instrument and should be interpreted as zero. Even though paint may be termed negative (less than 1.0 mg/cm) by EPA definition, disturbance of the paint may still be regulated by OSHA under 29 CFR 1926.62. Where lead is present at any level, appropriate engineering controls, work practices and personal protective equipment should be used until a negative exposure assessment can be determined.

VOID:

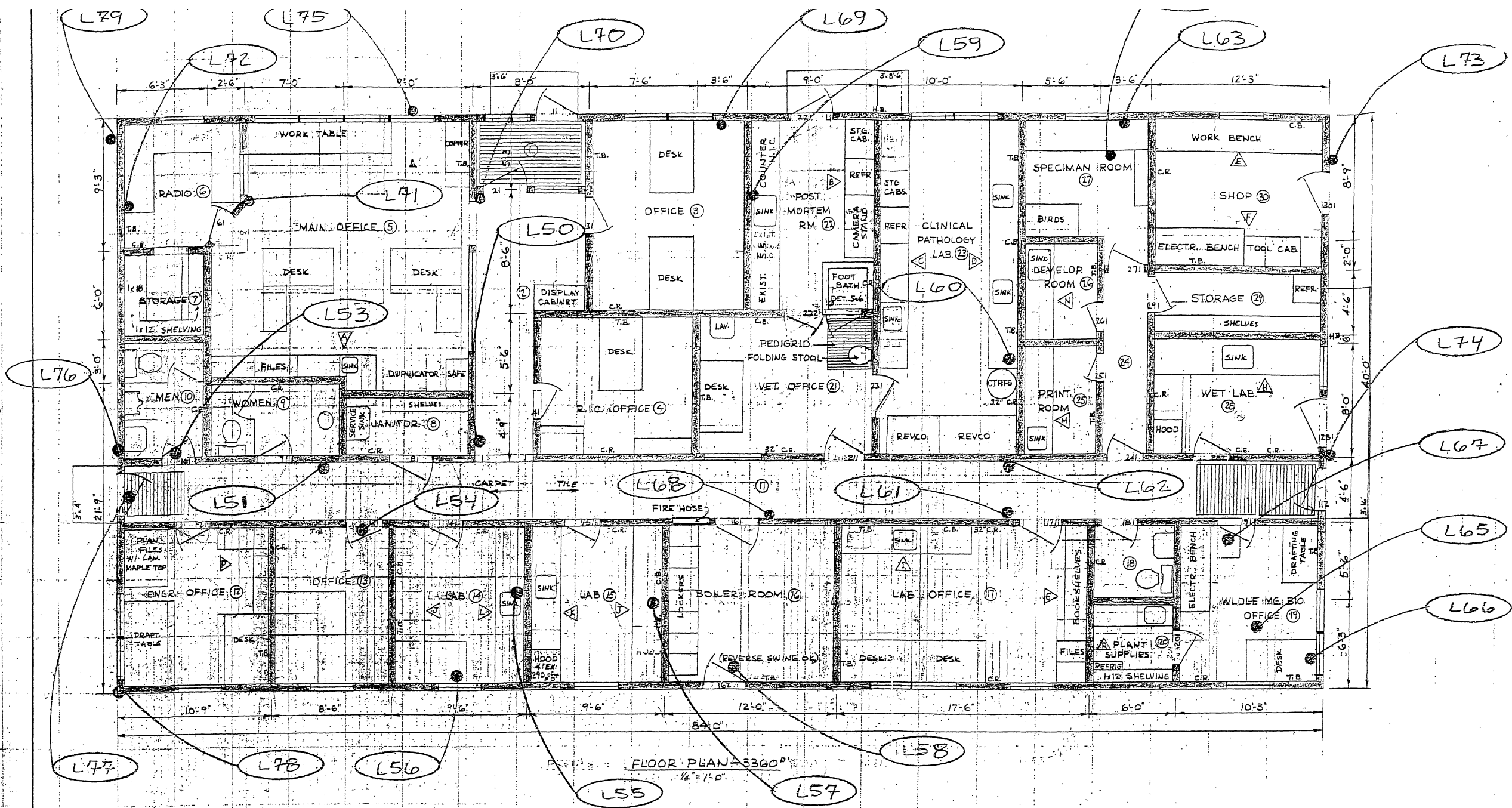
This indicates that the test was intentionally terminated by the operator due to operator error (e.g. - operator moved analyzer while testing).

APPENDIX B

Sketches of Sample Locations



ROOMS 2, 6, 7, 20		11/15/74
Revisions		Date
UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE BUREAU OF COMMERCIAL FISHERIES		
Submitted:	ST. PAUL ALASKA	
Reviewed:	OFFICE / LAB BUILDING	
Approved:	FLOOR PLAN	
Date: 11/15/74	Designed: [Signature]	Checked: [Signature]



ROOMS 2, 6, 7, 20		11/18/74	REVIEW
Revisions		Date	By
UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE BUREAU OF COMMERCIAL FISHERIES			
Submitted:	ST. PAUL ALASKA		
Reviewed:	OFFICE / LAB BUILDING		
Approved:	FLOOR PLAN		
Date: 2-4-74	Designed: RWF	Drawn:	Checked:
	Dwg. No. 74-P-1		Sheet A1 of 2

HAZARDOUS MATERIALS REMOVAL COST SUMMARY				
PROJECT:		LAB ADMIN BLDG		
LOCATION:		St Paul Island, Alaska		
BASIC HAZARDOUS MATERIAL REMOVAL COSTS (Includes Labor):				
ASBESTOS CONTAINING MATERIAL REMOVAL				\$25,235
OTHER HAZARDOUS MATERIALS				\$3,000
TOTAL REMOVAL COSTS:				\$28,235
BASIC SUPPORT COSTS:				
	QTY	UNIT	COST PER UNIT	TOTAL COST
PROJECT DESIGNER FEE:	1	EA @	\$500 LUMP	\$500
MEALS (7 pers.) FOR MOB/DEMOB DAYS:	2	DAYS @	\$350 DAY	\$700
MEALS (7 pers.) DURING PROJECT WORK:	5	DAYS @	\$350 DAY	\$1,750
RT AIRFARE TO SITE (7 pers.):	7	EA @	\$900 TICKET	\$6,300
TRAVEL DAY LABOR COSTS (6 pers. Crew):	2	DAYS @	\$1,920 DAY	\$3,840
AIR MONITORING PERSON:	5	DAYS @	\$425 DAY	\$2,125
TRAVEL DAY LABOR COSTS (air mon. pers.):	2	DAYS @	\$425 DAY	\$850
SHIPPING OF SUPPLIES:	1	LOT @	\$5,000 LUMP	\$5,000
TOTAL TASK COSTS:				\$21,065
TOTAL BASIC COSTS:				
	(QUANTITY & TASK)			\$49,300
LOCATION ADJUSTMENT:	INDEX =	1.10		\$54,230
CONTINGENCY:	PERCENT=	5		\$2,712
TOTAL BASIC COST ADJUSTED:				\$56,942
OTHER COSTS:				
INSURANCE	3.1	PCT		\$1,800
BONDING	3.0	PCT		\$1,700
OFFICE OVERHEAD	10.0	PCT		\$5,700
PROFIT	10.0	PCT		\$5,700
TOTAL OTHER COSTS:				\$14,900
TOTAL ESTIMATED REMOVAL & DISPOSAL COST :				\$71,842

NOTE: This is not a formal cost proposal. These costs are approximate, are based on general industry standards, and are based on information collected during the surveys, as well as information available at the time of preparation of this estimate. The removal costs will vary greatly depending on a number of factors, including the amount of material removed from each area (smaller amounts are not as cost efficient), whether one building or all three are done simultaneously, whether or not the local landfill is permitted to accept asbestos waste (etc.).

The following assumptions have been used in assigning a dollar amount to the asbestos removal subtotal:

- 1) 1 supervisor and 5 workers for each building; plus one air monitoring person
- 2) each building will be dealt with without regard to the other two buildings
- 3) one day travel each way to and from site for each person for each building
- 4) 10 work days each for staff quarters and clinic, 5 work days for lab building
- 5) Government to provide lodging for all personnel
- 6) Meal rate of \$50/day per individual for duration of project
- 7) asbestos waste allowed to be disposed of on St Paul Island

Estimate of costs for removal of miscellaneous hazardous items from three buildings on St Paul Island

Material	unit	Cost	Clinic		Staff qtrs		Lab admin	
			Quantity	extended price	Quantity	extended price	Quantity	extended price
PCB ballasts	EA	\$40	150	\$6,000	40	\$1,600	65	\$2,600
Mercury bulbs	EA	\$2.50	300	\$750	80	\$200	160	\$400
radioactive signs	EA	\$200	3	\$600		\$0		\$0
mercury thermostat	EA	\$125	8	\$1,000		\$0		\$0
emer lites w/batteries	EA	\$30	18	\$540		\$0		\$0
Subtotal ***				\$8,890		\$1,800		\$3,000

*** Removal/disposal costs for miscellaneous items includes all costs for removal/disposal (assuming personnel are already on site for asbestos removal).



Photo 1: NOAA Laboratory Administration Building.



Photo 2: Asbestos containing marble patterned floor tile (FT2, Sample A18).
Mastic was found to be non-asbestos containing.



Photo 3: Asbestos containing floor tile (tan with brown streaks) FT1 (Sample A01). FT1 occurs throughout southern end of building.



Photo 4: Boiler room, equipment contains asbestos gaskets (Sample A16); fire door is assumed to be asbestos containing.



Photo 5: Asbestos containing cement shingles and roof tarpaper. Samples A27, A28, A29 and A30.



Photo 6: Close-up of exterior of building.

HAZARDOUS MATERIALS SURVEY

**For
NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
PRIBILOF FACILITIES
ST. PAUL, ALASKA**



CLINIC BUILDING

**FINAL REPORT
November 2003**

Prepared by:



**ENVIRONMENTAL &
INSTRUMENTATION**
1611 East 1st Avenue
Anchorage, Alaska 99501

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Table 1: ASBESTOS SAMPLE SUMMARY TABLE

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ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Materials
CFR	Code of Federal Regulations
EHS	EHS Alaska, Inc.
EPA	Environmental Protection Agency
IATL	International Asbestos Testing Laboratories
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NOAA	National Oceanic & Atmospheric Administration
NRC	Nuclear Regulatory Commission
NVLAP	National Voluntary Laboratory Accredited Program
OSHA	Occupational Safety and Health Administration
PCB	Poly-chlorinated Biphenyls
PLM	Polarized Light Microscopy
PSI	PSI Environmental & Instrumentation
TCLP	Toxic Characteristics Leachate Procedure
TEM	Transmission Electron Microscopy
XRF	X-Ray Fluorescence

1.0 INTRODUCTION

PSI Environmental & Instrumentation (PSI) was contracted by the National Oceanic & Atmospheric Administration (NOAA) to perform hazardous material surveys of several buildings on St. Paul and St. George Islands, Alaska. Buildings on St. Paul Island include the NOAA Staff Quarters, the NOAA Laboratory Administration Building, the St. Paul Health Clinic Building, and an area of the lot behind the Staff Quarters Building, called Area 51. This report summarizes the survey performed at the Health Clinic building. The Health Clinic building was surveyed for the presence of hazardous building materials. Samples were collected during the survey to fulfill the requirements of National Emissions Standards for Hazardous Air Pollutants (NESHAP) for future renovation or demolition work. Sarah Kenshalo of PSI, accompanied by Brian Morgan of EHS-Alaska, Inc. (EHS) performed an inspection and collected samples from building materials on October 15 and 16, 2002.

The St. Paul Health Clinic is a compilation of three buildings. All three buildings are connected and have two floors and a basement. The foundation and basements are concrete. The exterior walls of the north section of the clinic were constructed of concrete. The other two sections have wood frame construction. The south building was constructed in 1932. The north building was built in 1936. The middle section, which connected the north and south sections, was built in the 1950's. Various renovation projects have occurred through the years, including the installation of new asphalt shingle roofing in 1992.

2.0 SCOPE OF WORK

Personnel inspected the building for the presence, extent, and condition of possible asbestos-containing materials (ACM), lead-based paint, leachable lead in building debris, mercury-containing items, polychlorinated biphenyl (PCB) ballasts in light fixtures, and items containing radioactive compounds. The purpose of the inspection was to identify hazardous materials that may be disturbed during future renovation or demolition activities. Field and laboratory data sheets are included as Appendix A, building plans displaying sample locations are presented in Appendix B. A cost estimate has been prepared for the removal and disposal of identified hazardous wastes from this building, and is included as Appendix C. A photo log from the survey is included as Appendix D.

3.0 SAMPLING AND ANALYSIS

3.1 Asbestos-Containing Materials

Personnel performed an inspection of the project building and collected samples of materials suspected of containing asbestos from 82 locations. Mr. Brian Morgan (EHS) is a U.S. Environmental Protection Agency (EPA) certified building inspector. All samples were analyzed for the presence of asbestos by polarized light microscopy (PLM), the method of analysis recommended by the EPA to determine the composition of suspected asbestos-containing materials. International Asbestos Testing Laboratories (IATL) in Mt. Laurel, New Jersey analyzed samples for asbestos content. IATL is a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. Only materials containing more than 1% total asbestos were classified as "asbestos-containing" based on EPA criteria. Table 1 provides a summary list of all samples collected with analytical results. Chain of Custody Record/Field Survey Data sheets and Laboratory reports are included in Appendix A. A floor plan showing locations of samples collected is provided in Appendix B.

Samples Collected. October 15-16, 2002

TABLE 1: ASBESTOS SAMPLE SUMMARY

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
CL1015-A01	12x12 glue-on ceiling tile with 1-1/2" fissures and dots (GCT-1)	Room 32, center ceiling	None Detected
CL1015-A02	Brown GCT mastic	Room 32, center ceiling	None Detected
CL1015-A03	Gypsum wallboard	Room 32, center ceiling	None Detected
CL1015-A04	Cream sheet vinyl with mauve and periwinkle speckles (SV-1)	Room 32, doorway	None Detected
CL1015-A05	Brown cove base mastic	Room 31, NW corner	None Detected
CL1015-A06	Joint compound	Room 30, adjacent to stairwell	None Detected
CL1015-A07	9x9 gray floor tile with white streaks (FT-1)	Room 1, E wall	1.3% Chrysotile
CL1015-A08	Joint compound	Room 3, N wall	3.4% Chrysotile
CL1015-A09	FT-1	Room 29, E wall	Tile 2.5% Chrysotile Mastic None Detected
CL1015-A10	Joint compound	Room 29, E wall	1.6% Chrysotile
CL1015-A11	Gypsum wallboard	Room 29, E wall	None Detected
CL1015-A12	Dark brown mastic from GCT-1	Room 29, above doorway	None Detected
CL1015-A13	GCT-1	Room 29, above doorway	None Detected
CL1015-A14	White sink undercoating	Room 29, NW corner	1.5% Chrysotile
CL1015-A15	FT-1	Corridor 26, E end	Tile 1.2% Chrysotile Mastic None Detected
CL1015-A16	Brown ceiling tile mastic	Corridor 21, ceiling	None Detected
CL1015-A17	GCT-1	Corridor 21, ceiling	None Detected
CL1015-A18	Brown cove base mastic	Room 4, E wall	None Detected
CL1015-A19	SV-1	Room 4, E wall	None Detected
CL1015-A20	White sink undercoating	Room 24	6.9% Chrysotile
CL1015-A21	Joint compound	Room 25, S end of shielding wall	3.5% Chrysotile
CL1015-A22	Brown marlite mastic	Room 22, S wall	None Detected
CL1015-A23	Gypsum wallboard	Room 22, W wall	None Detected
CL1015-A24	White sink undercoating	ROOM 7	1.8% Chrysotile

TABLE 1: ASBESTOS SAMPLE SUMMARY

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
CL1015-A25	White sheet vinyl with marbled mauve and purple streaks (SV-2)	Room 20, N wall	None Detected
CL1015-A26	Old mastic under carpet	Top of stair landing at N end of corridor 21	None Detected
CL1015-A27	Joint compound	Room 18, above doorway	None Detected
CL1015-A28	Pink sink undercoating	Room 18, S wall	10% Chrysotile
CL1015-A29	Brown cove base mastic	Room 18, W wall	None Detected
CL1015-A30	Same as SV-1 but with textured pattern (SV-4)	Room 18, W wall	SV None Detected Mastic None Detected
CL1015-A31	Old mystery sheet vinyl under SV-4	Room 18, W wall	SV None Detected Mastic None Detected
CL1015-A32	Gypsum wallboard	Room 18, W wall	None Detected
CL1015-A33	Sheet vinyl made to look like 12 x 12 floor tile, light marble pattern (SV-5)		None Detected
CL1015-A34	Tan flooring mastic	Room 10, NE corner	None Detected
CL1015-A35	Joint compound	Room B11, ceiling	None Detected
CL1015-A36	Joint compound	Room B10, N wall	None Detected
CL1015-A37	Gypsum wallboard	Room B10, N wall	None Detected
CL1015-A38	Gypsum wallboard	B15, bottom of stair landing	None Detected
CL1015-A39	Joint compound	B15, bottom of stair landing	None Detected
CL1015-A40	Gypsum wallboard	Room B1, Ceiling	None Detected
CL1015-A41	Black tarpaper	Room B2, Hole in ceiling leading to floor above	None Detected
CL1015-A42	Gray felt paper	Room B2, Hole in ceiling leading to floor above	None Detected
CL1015-A43	Gypsum wallboard	Room B2, Hole in ceiling leading to floor above	None Detected
CL1015-A44	Joint compound	Room B2, above doorway	None Detected
CL1015-A45	Black floor tile mastic	Room B3, center	4.6% Chrysotile
CL1015-A46	9 x9 floor tile, tan with white & brown streaks (FT-2)	Room B3, center	None Detected

TABLE 1: ASBESTOS SAMPLE SUMMARY

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
CL1015-A47	Gray felt paper	B14, ceiling, NW corner	None Detected
CL1015-A48	Tan floor mastic	Beneath rubber flooring in B 13 stair landing	None Detected
CL1015-A49	Brown cove base mastic	B13, W wall	None Detected
CL1015-A50	Sheet vinyl, ¼" tile pattern (SV-6)	B13, W wall	SV None Detected Mastic None Detected
CL1015-A51	Tan stair tread mastic	B13, W stairwell	None Detected
CL1015-A52	Black mastic	E wall of room B6	None Detected
CL1015-A53	Flue sealant	Room B4	None Detected
CL1015-A54	Tarpaper	Main entry vestibule, W wall, S end	None Detected
CL1015-A55	Cement shingle	Main entry vestibule, W wall, S end	20% Chrysotile
CL1015-A56	Stair tread mastic	Main entry vestibule, stairs at S end	None Detected
CL1015-A57	Cement shingle	Exterior wall of Main entry vestibule	20% Chrysotile
CL1015-A58	Tarpaper	Exterior wall of Main entry vestibule	None Detected
CL1015-A59	Asphalt shingle	Roof, S edge	None Detected
CL1015-A60	Asphalt shingle	Roof, above pharmacy	None Detected
CL1016-A61	Felt Paper	Floor of storage room, W of 2-1	None Detected
CL1016-A62	Joint compound	Room 2-1, N wall	None Detected
CL1016-A63	SV-1	Room 2-4 behind door	SV None Detected Mastic None Detected
CL1016-A64	Brown cove base mastic	Room 2-4 behind door	None Detected
CL1016-A65	Gypsum wallboard	Room 2-7, E wall	None Detected
CL1016-A66	Joint compound	Room 2-7, E wall	None Detected
CL1016-A67	Tan flooring mastic	Room 2-7, E wall	None Detected
CL1016-A68	Black roof sealant	Outside E window of room 2-7	None Detected
CL1016-A69	Tarpaper	Under cement shingle on exterior wall of 2-12	None Detected
CL1016-A70	Brown GCT mastic	Room 2-10, NE corner	None Detected
CL1016-A71	GCT-1	Room 2-10, NE corner	None Detected
CL1016-A72	Gypsum wallboard	Room 2-10, NE corner	None Detected
CL1016-A73	12 x 12 gray floor tile, with white streaks (FT-3)	Closet in SE corner of 2-10	Tile 2.2% Chrysotile Mastic None Detected

TABLE 1: ASBESTOS SAMPLE SUMMARY

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
CL1016-A74	Brown cove base mastic	S wall of room 2-10	None Detected
CL1016-A75	White sink undercoating	Room 2-11	10% Chrysotile
CL1016-A76	Gypsum wallboard	Room 2-12, E wall	None Detected
CL1016-A77	Joint compound	Room 2-12, E wall	None Detected
CL1016-A78	Pink sink undercoating	Room 2-22, W wall	10% Chrysotile
CL1016-A79	Joint compound	Room 2-23, E wall	None Detected
CL1016-A80	Gypsum wallboard	Hatch above 2-22	None Detected
CL1016-A81	Gypsum wallboard	Hatch above 2-25	None Detected
CL1016-A82	Joint compound	Room 2-20, N wall	None Detected

The testing method used (polarized light microscopy [PLM]) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation should be made by quantitative transmission electron microscopy (TEM).

Joint Compound

The joint compound in the gypsum wallboard system was found to be asbestos-containing. This material was located in walls and ceilings throughout the facility. The material was in good condition and was considered non-friable (not easily crumbled). There was approximately 24,000 square feet of gypsum wallboard/joint compound system in the building.

Floor Tile and Mastic

The 9" x 9" and the 12" x 12" floor tile, as well as the mastic associated with these tiles, were found to be asbestos-containing. These materials were located in various locations throughout all floors of the south and center portion of the facility. These materials were often below newer, non-asbestos-containing floor coverings. The materials were in fair to good condition and were considered non-friable. There was approximately 1,200 square feet of this tile and mastic in the building.

Sink Undercoating

The sprayed-on undercoating on stainless steel sinks was found to be asbestos containing. The material was in good condition was considered non-friable. The material was encountered in various colors. There were approximately 10 of these sinks throughout the facility.

Cement Shingles

The cement shingles on the exterior of the facility were found to be asbestos containing. The material was in fair to good condition and was considered non-friable. This material covered approximately 2,600 square feet on the building. No attempt was made to increase the amount of material due to overlap. This material was not removed from exterior walls when the center portion of the building was added. Therefore, these shingles exist beneath newer, non-shingled walls.

Flange Gaskets, Boiler Gaskets and Valve Packings

Flange gaskets and packing on valves could not be sampled without disassembly, but were assumed to contain asbestos based on the age of the equipment.

Fire Door Insulation

The insulation material inside fire doors was found to be asbestos containing. The material was in good condition and was considered friable. There were 3 of these doors in the basement of the facility.

Settled and Concealed Dusts

Workers should be made aware that the potential exists for encountering dusts containing asbestos.

3.2 Lead-Containing Materials

Lead Paint

Paint was tested for the presence of lead in 61 locations throughout the building. Paint was analyzed using a NITON XL309 X-Ray Fluorescence (XRF) lead paint analyzer (Serial # U862NR0666 with software version 5.3). The instrument was operated in the "K & L + Spectra" mode. Prior to sample analysis, an instrument self-calibration test was performed and the instrument calibration was checked using a set of government traceable lead paint samples. Calibration was checked using known paint film samples containing 0.0 mg/ cm², 0.3 +/- 0.1 mg/ cm², 1.0 +/- 0.1 mg/ cm², 1.6 +/- 0.2 mg/ cm², and 3.5 +/- 0.3 mg/ cm² of lead. The instrument was calibrated and all calibration tests were successful. Calibration tests are indicated in the test results table with the word "calibration" in the room column. Sampling results are included in Appendix A. A drawing showing sample locations is included in Appendix B.

The EPA has determined that paints containing lead greater than 1 milligram per square centimeter (mg/cm²) are considered "lead based paints". Ten painted surface were found to have paint with lead in excess of the 1.0 mg/ cm² threshold during this survey. However, during a much more comprehensive lead based paint screening performed in July 2002, lead based paints were found to exist on all types of surfaces throughout the facility.

Although there is no requirement to remove lead-based or lead-containing paints from this building, any loose or peeling paint should be removed to prevent potential lead dust exposure to construction personnel during demolition. Additionally, wherever torch cutting or welding are to take place, paint should be removed from the heat-affected area.

The U.S. Occupational Safety and Health Administration (OSHA) does not recognize a lower limit to the quantity of lead present in paint for their standard, 29 CFR 1926.62, to be in effect. However, lead in paint at the levels found can expose construction/demolition workers to lead

levels in excess of the permissible exposure limits set by the OSHA standard if proper work controls and protective equipment are not used during renovation.

Solder on Piping and Tubing

Depending on the age of the piping and tubing, soldered joints typically contain metallic lead.

Settled and Concealed Dusts

Workers should be made aware that the potential exists for encountering dusts containing lead.

Lead Sheeting

Although not detected by the XRF, lead sheeting is believed to exist in the walls of rooms currently and previously used as x-ray rooms

Batteries

Emergency lights that typically contain lead acid type batteries were present in the building. There were 18 of these lights in the building.

Leachable Lead

A composite sample of representative building materials was collected for leachable lead analysis. Sampling was performed using the guidelines set forth in the United States Army Environmental Hygiene Agency's *Sampling Protocol – Building Demolition Debris and Buildings Painted with Lead-Based Paint*. This composite sample was analyzed for leachable lead content by means of toxicity characteristic leaching procedure (TCLP). The composite sample was analyzed by EMSL Analytical, Westmont, New Jersey. The result of this composite sample analysis shows a concentration of <0.4 mg/L of lead, well below the allowable 5 mg/L as established by the EPA. This result indicates that the waste stream from demolition/renovation of this building would be considered non-hazardous waste with respect to lead. The Chain of Custody Record/Field Survey Data sheets with results are included in Appendix A.

3.3 Polychlorinated Biphenyls-Containing Materials

Fluorescent light fixtures were inventoried and inspected at random for the presence of polychlorinated biphenyl (PCB) containing ballasts. Unless ballasts were specifically labeled "No PCBs", they were assumed to contain PCBs. Approximately 150 PCB-containing ballasts were identified.

3.4 Mercury-Containing Materials

Fluorescent lamps were also inventoried in the Health Clinic. Due to their age, all fluorescent lamps were assumed to contain mercury. Prior to disposal, these should be analyzed for leachable mercury content by means of a TCLP. This test will determine whether they are suitable for disposal in a landfill or whether they should be treated as hazardous waste at the time of disposal. There were approximately 300 of these bulbs in the facility.

3.5 Other Hazards

Self-Illuminating Exit Signs

Three self-illuminating exit signs were present in the building. These signs contain a radioactive material that is regulated under a general license by the Nuclear Regulatory Commission (NRC). When removed during renovations, these signs should be promptly returned to the owner for reuse or returned to the manufacturer for disposal or recycling.

4.0 REGULATORY CONSTRAINTS

4.1 Asbestos-Containing Materials

The EPA regulations issued as Title 40 of the Code of Federal Regulations (CFR), Part 61 (40 CFR 61) under NESHAP, established procedures for handling ACM during asbestos removal and waste disposal. These regulations require an owner (or the owner's contractor) to notify the EPA of asbestos removal operations and to establish responsibility for the removal, transportation, and disposal of asbestos. The disposal of asbestos waste is regulated by the EPA, the State of Alaska Department of Environmental Conservation, and the disposal site operator. OSHA regulation 29 CFR 1926.1101 requires air monitoring during ACM removal and during demolition to determine the airborne concentrations of asbestos to which workers may be exposed. 29 CFR 1926.1101 also establishes permissible exposure limits, respiratory protection and protective clothing requirements, and establishes standard work practices and engineering controls for asbestos removal. All federal, state and local standards regulating asbestos should be followed during renovations of this building.

4.2 Lead-Containing Materials

Federal OSHA requirements (29 CFR 1926.62), and the Alaska Administrative Code (AAC) (8 AAC Chapter 61) have promulgated or adopted regulations that apply to all construction work where employees may be exposed to lead. Due to the presence of lead-containing paint in and on the surfaces to be renovated, the renovation contractor is required to monitor his/her workers to determine if they will be exposed to lead at or above the action level established in the regulation. Until this "initial determination" establishes that workers are not exposed above the permissible exposure limit, the contractor is required to provide worker and site protection procedures. Continued air and medical monitoring may be required if exposure is above the action level.

The EPA requires that actual construction or demolition debris that contains lead or lead-containing paint be tested using the TCLP procedure to determine if the waste must be treated as hazardous waste. In order to classify the lead wastes as hazardous or non-hazardous for disposal purposes, these TCLP tests are mandatory. The TCLP test determines the leachability of lead from the paint and substrate. Currently, the allowable leachate of lead in order to be classified as a non-hazardous waste is 5 milligrams of lead per liter of leachate (mg/l) or less. Anything above this 5 mg/l level is classified as hazardous waste and must be disposed of in the "Lower 48" at an approved permitted Transportation,

Storage, Disposal Facility (TSDF). All federal, state and local standards regulating lead and lead-containing wastes should be followed during the demolition of this building.

4.3 PCB-Containing Materials

Products that contain PCBs at 50 ppm or greater are regulated by the EPA. The EPA has promulgated regulations (40 CFR Part 761) that cover the proper handling and disposal of PCB-containing materials. Workers who remove or handle PCB-containing or PCB-contaminated materials or who transport or dispose of PCB wastes must be trained and certified in Hazardous Waste Operations and Emergency Response (HAZWOPER) as required by 29 CFR 1910.120 and the State of Alaska Department of Labor (8 AAC 61). The Department of Transportation under 49 CFR Parts 100-199 regulates the marking, packaging, handling and transportation of hazardous materials. All federal, state and local standards regulating PCBs should be followed during the demolition of this building.

4.4 Mercury-Containing Materials

Building waste materials containing mercury or mercury compounds are considered hazardous waste if the mercury levels, as determined by a TCLP test of the waste, exceed 0.2 milligrams per liter (0.2 mg/l). The EPA has promulgated regulations (40 CFR Parts 261, 262, and 263) that cover the proper characterization, handling, transportation and disposal of hazardous waste. Workers who remove or handle hazardous waste and transport or dispose of hazardous wastes must be trained and certified in HAZWOPER as required 29 CFR 1910.120 and the State of Alaska Department of Labor (8 AAC 61). The Department of Transportation under 49 CFR Parts 100-199 regulates the marking, packaging, handling and transportation of hazardous materials. All federal, state and local standards regulating mercury should be followed during the renovation of this building.

4.5 Other Hazardous Materials

Exit signs in the building contain a radioactive substance that is regulated by the NRC under general license. These signs must be returned to the manufacturer for disposal or disposed of at a waste disposal site certified for radioactive wastes.

APPENDIX A

Bulk Asbestos and TCLP Field Data Sheets, Laboratory Reports and XRF Data

APPENDIX B

Sketches of Sample Locations

APPENDIX C

Abatement Cost Summary

APPENDIX D

Photo Log

APPENDIX A

Bulk Asbestos and TCLP Field Data Sheets, Laboratory Reports and XRF Data


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CHAIN OF CUSTODY RECORD/FIELD SURVEY DATA

Page 1 of 6

FIELD COLLECTION DATE: 10-15-02		JOB #: 5766-01		MATERIAL TYPE: (Circle) ASBESTOS LEAD		TOTAL QUANTITIES: \$2																																																	
PROJECT NAME: NOAA Pribilofs Survey.				BULK ANALYSIS REQUESTED: <input checked="" type="checkbox"/> PLM <input type="checkbox"/> PLM DUST <input type="checkbox"/> TEM BULK		<input type="checkbox"/> LEAD TCLP <input type="checkbox"/> LEAD PPM																																																	
FACILITY: Clinic				DISPOSAL: Normal		TURNAROUND: 5 Day																																																	
SPECIAL INSTRUCTIONS:																																																							
COLLECTED BY (signature) Brian Morgan PRINTED NAME T-7577-8 CERT# SHIPPING METHOD FedEx 836893778524 COURIER (signature) DATE/TIME 10/17/02		IATL SELECTED LABORATORY 18 2002 SAMPLES ACCEPTED BY DATE/TIME ANALYST'S SIGNATURE DATE 10-25-02		COMMENTS:																																																			
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SAMPLE ID	SAMPLE DESCRIPTION (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/REF)	RESULTS																																																				
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RETURN A SIGNED COPY OF THIS FORM WITH THE FINAL REPORT TO EHS-ALASKA HS-893


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FIELD SURVEY DATA (continued)

Page 2 of 6

PROJECT NAME: NOAA Pribilofs Survey		FACILITY: Clinic	
JOB NUMBER: 5766-01		DATE: -02	COLLECTED BY: Brian Morgan
SAMPLE ID	SAMPLE DESCRIPTION (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/REF)	RESULTS
CL1015-A12 1598941	Dark brown mastic from GCT-1	Room 29, above doorway	ND
CL1015-A13 1598942	GCT-1	Room 29, above doorway	ND
CL1015-A14 1598943	White sink undercoating	Room 29, NW corner	1.5%OC
CL1015-A15 1598944	FT-1	Corridor 26, E end	TILE 1.2%OC MAST ND
CL1015-A16 1598945	Brown ceiling tile mastic	Corridor 21, ceiling	ND
CL1015-A17 1598946	GCT-1	Corridor 21, ceiling	ND
CL1015-A18 1598947	Brown cove base mastic	Room 4, E wall	ND
CL1015-A19 1598948	SV-1	Room 4, E wall	ND
CL1015-A20 1598949	White sink undercoating	Room 24	6.9%OC
CL1015-A21 1598950	Joint compound	Room 25, S end of shielding wall	3.5%OC
CL1015-A22 1598951	Brown marlite mastic	Room 22, S wall	ND
CL1015-A23 1598952	Gypsum wallboard	Room 22, W wall	ND
CL1015-A24 1598953	White sink undercoating	ROOM 7	1.8%OC
CL1015-A25 1598954	White sheet vinyl with marbled mauve and purple streaks (SV-2)	Room 20, N wall	ND
CL1015-A26 1598955	Old mastic under carpet	Top of stair landing at N end of corridor 21	ND
CL1015-A27 1598956	Joint compound	Room 18, above doorway	ND


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FIELD SURVEY DATA (continued)

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JOB NUMBER: 5766-01		DATE: -02	COLLECTED BY: Brian Morgan
SAMPLE ID	SAMPLE DESCRIPTION (COLOR, MATERIAL TYPE, LAYERS, PERMEABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/REF)	RESULTS
CL1015-A28 1598957	Pink sink undercoating	Room 18, S wall	10970 C
CL1015-A29 1598958	Brown cove base mastic	Room 18, W wall	ND
CL1015-A30 1598959	Same as SV-1 but with textured pattern (SV-4)	Room 18, W wall	SV-ND MAST-ND
CL1015-A31 1598960	Old mystery sheet vinyl under SV-4	Room 18, W wall	SV-ND MAST-ND
CL1015-A32 1598961	Gypsum wallboard	Room 18, W wall	ND
CL1015-A33 1598962	Sheet vinyl made to look like 12 x 12 floor tile, light marble pattern (SV-5)		ND
CL1015-A34 1598963	Tan flooring mastic	Room 10, NE corner	NP
CL1015-A35 1598964	Joint compound	Room B11, ceiling	ND
CL1015-A36 1598965	Joint compound	Room B10, N wall	ND
CL1015-A37 1598966	Gypsum wallboard	Room B10, N wall	NP
CL1015-A38 1598967	Gypsum wallboard	B15, bottom of stair landing	ND
CL1015-A39 1598968	Joint compound	B15, bottom of stair landing	NP
CL1015-A40 1598969	Gypsum wallboard	Room B1, Ceiling	NP
CL1015-A41 1598970	Black tarpaper	Room B2, Hole in ceiling leading to floor above	NP
CL1015-A42 1598971	Gray felt paper	Room B2, Hole in ceiling leading to floor above	NP

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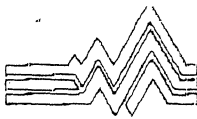
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Page 4 of 6

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JOB NUMBER: 5766-01		DATE: -02	COLLECTED BY: Brian Morgan
SAMPLE ID	SAMPLE DESCRIPTION (COLOR, MATERIAL TYPE, LAYERS, PRIORITY)	LOCATION/COMMENT (INCLUDING PHOTO/REF)	RESULTS
CL1015-A43 1598972	Gypsum wallboard	Room B2, Hole in ceiling leading to floor above	ND
CL1015-A44 1598973	Joint compound	Room B2, above doorway	ND
CL1015-A45 1598974	Black floor tile mastic	Room B3, center	4.6%OC
CL1015-A46 1598975	9 x9 floor tile, tan with white & brown streaks (FT-2)	Room B3, center	ND
CL1015-A47 1598976	Gray felt paper	B14, ceiling, NW corner	ND
CL1015-A48 1598977	Tan floor mastic	Beneath rubber flooring in B 13 stair landing	ND
CL1015-A49 1598978	Brown cove base mastic	B13, W wall	NP
CL1015-A50 1598979	Sheet vinyl, 1/4" tile pattern (SV-6)	B13, W wall	SV-ND MAST-ND
CL1015-A51 1598980	Tan stair tread mastic	B13, W stairwell	ND
CL1015-A52 1598981	Black mastic	E wall of room B6	NP
CL1015-A53 1598982	Flue sealant	Room B4	ND
CL1015-A54 1598983	Tarpaper	Main entry vestibule, W wall, S end	ND
CL1015-A55 1598984	Cement shingle	Main entry vestibule, W wall, S end	20%OC
CL1015-A56 1598985	Stair tread mastic	Main entry vestibule, stairs at S end	ND
CL1015-A57 1598986	Cement shingle	Exterior wall of Main entry vestibule	20%OC

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FIELD SURVEY DATA (continued)

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SAMPLE ID	SAMPLE DESCRIPTION (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/REF)	RESULTS
CL1015-A58 1598987	Tarpaper	Exterior wall of Main entry vestibule	ND
CL1015-A59 1598988	Asphalt shingle	Roof, S edge	ND
CL1015-A60 1598989	Asphalt shingle	Roof, above pharmacy	ND
CL1016-A61 1598990	Felt Paper	Floor of storage room, W of 2-1	ND
CL1016-A62 1598991	Joint compound	Room 2-1, N wall	ND
CL1016-A63 1598992	SV-1	Room 2-4 behind door	MAST ND MAST ND
CL1016-A64 1598993	Brown cove base mastic	Room 2-4 behind door	ND
CL1016-A65 1598994	Gypsum wallboard	Room 2-7, E wall	ND
CL1016-A66 1598995	Joint compound	Room 2-7, E wall	ND
CL1016-A67 1598996	Tan flooring mastic	Room 2-7, E wall	ND
CL1016-A68 1598997	Black roof sealant	Outside E window of room 2-7	ND
CL1016-A69 1598998	Tarpaper	Under cement shingle on exterior wall of 2-12	ND
CL1016-A70 1598999	Brown GCT mastic	Room 2-10, NE corner	ND
CL1016-A71 1599000	GCT-1	Room 2-10, NE corner	ND
CL1016-A72 1599001	Gypsum wallboard	Room 2-10, NE corner	ND

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FIELD SURVEY DATA (continued)

Page 6 of 6

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SAMPLE ID	SAMPLE DESCRIPTION (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/REF)	RESULTS
CL1016-A73 1599002	12 x 12 gray floor tile, with white streaks (FT-3)	Closet in SE corner of 2-10	TILE - 20% C MAST - ND
CL1016-A74 1599003	Brown cove base mastic	S wall of room 2-10	ND
CL1016-A75 1599004	White sink undercoating	Room 2-11	10% C
CL1016-A76 1599005	Gypsum wallboard	Room 2-12, E wall	ND
CL1016-A77 1599006	Joint compound	Room 2-12, E wall	ND
CL1016-A78 1599007	Pink sink undercoating	Room 2-22, W wall	10% C
CL1016-A79 1599008	Joint compound	Room 2-23, E wall	ND
CL1016-A80 1599009	Gypsum wallboard	Hatch above 2-22	ND
CL1016-A81 1599010	Gypsum wallboard	Hatch above 2-25	ND
CL1016-A82 1599011	Joint compound	Room 2-20, N wall	ND
	End		
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CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/31/2002
Project: NOAA Pribilofs; Clinic, 10-15-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598930	Material Description:	Tan/White Ceiling Tile		
Client No.:	CL1015-A01	Location:	Room 32; Center	12x12	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	95	Cellulose	5	

Lab No.	1598931	Material Description:	Tan/White Ceiling Tile		
Client No.:	CL1015-A02	Location:	Room 32; Center		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	2	Other	98	

Lab No.	1598932	Material Description:	Tan/White Sheetrock		
Client No.:	CL1015-A03	Location:	Room 32; Center		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	40	Cellulose	60	
No Joint Compound		Trace	Fibrous Glass		

Lab No.	1598933	Material Description:	White/Grey		
Client No.:	CL1015-A04	Location:	Vinyl Sheet Flooring	Tan Mastic; Room 32	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	20	Cellulose	80	
		Trace	Fibrous Glass		

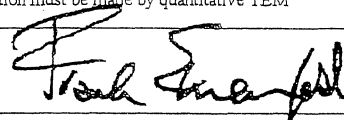
NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*

Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM

Analysis Performed By: _____

Approved By: _____

Frank E. Ehrenfeld, III
Laboratory Director

Date: _____

CERTIFICATE OF ANALYSIS

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10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs; Clinic, 10-15-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No. 1598933 Material Description: White/Grey
Client No.: CL1015-A04 Location: Vinyl Sheet Flooring Tan Mastic; Room32

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100
Tan Mastic				
From Above				

Lab No. 1598934 Material Description: BrownCovebaseMastic
Client No.: CL1015-A05 Location: Room 31 N.W. Corner

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No. 1598935 Material Description: White Joint Compound
Client No.: CL1015-A06 Location: Room 30 Adjacent ToStairwell

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No. 1598936 Material Description: Grey Floor Tile
Client No.: CL1015-A07 Location: Room 1; E.Wall 9x9

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.3	Chrysotile	None Detected	None Detected	PC 98.7
Insufficient Mastic				

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Frank E. Ehrenfeld, III
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Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs; Clinic, 10-15-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598937	Material Description:	White Joint Compound		
Client No.:	CL1015-A08	Location:	Room 3; N.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 3.4	Chrysotile	None Detected	None Detected	PC 96.6	

Lab No.	1598938	Material Description:	Grey Floor Tile		
Client No.:	CL1015-A09	Location:	Black Mastic	Room 29; E.Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 2.5	Chrysotile	None Detected	None Detected	PC 97.5	

Lab No.	1598938	Material Description:	Grey Floor Tile		
Client No.:	CL1015-A09	Location:	Black Mastic	Room 29; E.Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	
Black Mastic					
From Above					

Lab No.	1598939	Material Description:	White Joint Compound		
Client No.:	CL1015-A10	Location:	Room 29; E.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 1.6	Chrysotile	None Detected	None Detected	PC 98.4	

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Date: _____

Approved By: _____

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Report Date: 10/31/2002
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Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598940	Material Description:	White/Tan Sheetrock		
Client No.:	CL1015-A11	Location:	Room 29; E. Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	35	Cellulose	65	
Joint Compound		Trace	Fibrous Glass		
Provided Separately					

Lab No.	1598941	Material Description:	Brown GCT-1 Mastic		
Client No.:	CL1015-A12	Location:	Room 29	Above Doorway	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	2	Other	98	

Lab No.	1598942	Material Description:	Tan Ceiling Tile		
Client No.:	CL1015-A13	Location:	Room 29	Above Doorway	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	98	Cellulose	2	

Lab No.	1598943	Material Description:	White Fibrous		
Client No.:	CL1015-A14	Location:	Sink Undercoating	Room 29; N.W. Corner	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 1.5	Chrysotile	None Detected	None Detected	PC 98.5	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444**

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Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598944	Material Description:	Grey Floor Tile	
Client No.:	CL1015-A15	Location:	Black Mastic	Corridor 26; E.End
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.2	Chrysotile	None Detected	None Detected	PC 98.8

Lab No.	1598944	Material Description:	Grey Floor Tile	
Client No.:	CL1015-A15	Location:	Black Mastic	Corridor 26; E.End
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	5	Cellulose	95
Black Mastic				
From Above				

Lab No.	1598945	Material Description:	Brown CT Mastic	
Client No.:	CL1015-A16	Location:	Corridor 21; Ceiling	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	2	Other	98

Lab No.	1598946	Material Description:	White/Tan Ceiling Tile	
Client No.:	CL1015-A17	Location:	Corridor 21; Ceiling	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	95	Cellulose	5

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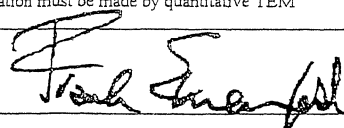
Analysis Method: EPA 600/R-93/116

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Analysis Performed By: _____

Date: _____

Approved By: _____


Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/25/2002
Project: NOAA Pribilofs, Clinic, 10-15-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598947	Material Description:	BrownCovebaseMastic		
Client No.:	CL1015-A18	Location:	Room 4; E.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598948	Material Description:	Off-White/Grey		
Client No.:	CL1015-A19	Location:	Vinyl Sheet Flooring	Room 4; E.Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	20	Cellulose	80	
No Mastic		Trace	Fibrous Glass		

Lab No.	1598949	Material Description:	White Fibrous		
Client No.:	CL1015-A20	Location:	Sink Undercoating	Room 24	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 6.9	Chrysotile	None Detected	None Detected	PC 93.1	

Lab No.	1598950	Material Description:	White Joint Compound		
Client No.:	CL1015-A21	Location:	Room 25; S.End Of	Shielding Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 3.5	Chrysotile	None Detected	None Detected	PC 96.5	

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Eagle River AK 99577

Report Date: 10/25/2002**Project:** NOAA Pribilofs; Clinic, 10-15-02**Project No.:** 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No. 1598951
Client No.: CL1015-A22**Material Description:** Brown Mastic
Location: Room 22; S.Wall

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No. 1598952
Client No.: CL1015-A23**Material Description:** White/Tan Sheetrock
Location: Room 22; W.Wall

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	5	Cellulose	95
No Joint Compound		Trace	Fibrous Glass	

Lab No. 1598953
Client No.: CL1015-A24**Material Description:** White Fibrous
Location: Sink Undercoating Room 7

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.8	Chrysotile	None Detected	None Detected	PC 98.2

Lab No. 1598954
Client No.: CL1015-A25**Material Description:** White/Grey
Location: Vinyl Sheet Flooring Room 20; N.Wall

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	20	Cellulose	80
No Mastic		Trace	Fibrous Glass	

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Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598955	Material Description:	Black Carpet Mastic		
Client No.:	CL1015-A26	Location:	Top Of Stair Landing N.End Of Corridor 21		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	Trace	Cellulose	100	

Lab No.	1598956	Material Description:	White/Tan Jt. Compound		
Client No.:	CL1015-A27	Location:	Room 18 Above Doorway		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598957	Material Description:	Pink Caulk		
Client No.:	CL1015-A28	Location:	Sink Undercoating Room 18; S.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
10	Chrysotile	None Detected	None Detected	90	

Lab No.	1598958	Material Description:	Brown Covebase Mastic		
Client No.:	CL1015-A29	Location:	Room 18; W.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

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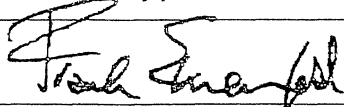
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BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598959	Material Description:	Tan Vinyl Sheet Floor		
Client No.:	CL1015-A30	Location:	Yellow Mastic	Room 18; W.Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	30	Cellulose	70	

Lab No.	1598959	Material Description:	Tan Vinyl Sheet Floor		
Client No.:	CL1015-A30	Location:	Yellow Mastic	Room 18; W.Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	
Yellow Mastic					
From Above					

Lab No.	1598960	Material Description:	OffWhtVinylSheetFloor		
Client No.:	CL1015-A31	Location:	Yellow Mastic	Room 18; W.Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	30	Cellulose	70	

Lab No.	1598960	Material Description:	OffWhtVinylSheetFloor		
Client No.:	CL1015-A31	Location:	Yellow Mastic	Room 18; W.Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	
Yellow Mastic					
From Above					

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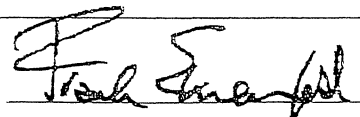
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Report Date: 10/31/2002
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BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598961	Material Description:	White Sheetrock		
Client No.:	CL1015-A32	Location:	Room 18; W.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	2	Cellulose	95	
No Joint Compound		3	Fibrous Glass		

Lab No.	1598962	Material Description:	Lt.Grey		
Client No.:	CL1015-A33	Location:	Vinyl Sheet Flooring	12x12	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	15	Cellulose	85	
Insufficient Mastic					

Lab No.	1598963	Material Description:	Tan/Brown Mastic		
Client No.:	CL1015-A34	Location:	Room 10; N.E.Corner		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

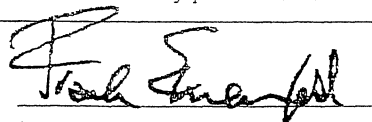
Lab No.	1598964	Material Description:	Off-White/Jt.Compound		
Client No.:	CL1015-A35	Location:	Room B11; Ceiling		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444**

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598965	Material Description:	White Joint Compound		
Client No.:	CL1015-A36	Location:	Room B10; N.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598966	Material Description:	Off-White Sheetrock		
Client No.:	CL1015-A37	Location:	Room B10; N.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	20	Cellulose	80	
Joint Compound					
Provided Separately					

Lab No.	1598967	Material Description:	Off-White Sheetrock		
Client No.:	CL1015-A38	Location:	B15; Bottom	Of Stair Landing	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	20	Cellulose	80	
Joint Compound					
Provided Separately					

Lab No.	1598968	Material Description:	White Joint Compound		
Client No.:	CL1015-A39	Location:	B15; Bottom	Of Stair Landing	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598969	Material Description:	Off-White Sheetrock		
Client No.:	CL1015-A40	Location:	Lt.TanJointCompound Room B1; Ceiling		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	25	Cellulose	75	

Lab No.	1598969	Material Description:	Off-White Sheetrock		
Client No.:	CL1015-A40	Location:	Lt.TanJointCompound Room B1; Ceiling		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	
Joint Compound					
From Above					

Lab No.	1598970	Material Description:	Black Tar Paper		
Client No.:	CL1015-A41	Location:	RoomB2;HoleInCeiling LeadingToFloorAbove		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	80	Cellulose	20	

Lab No.	1598971	Material Description:	Grey/Black Tar Paper		
Client No.:	CL1015-A42	Location:	RoomB2;HoleInCeiling LeadingToFloorAbove		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	70	Cellulose	30	

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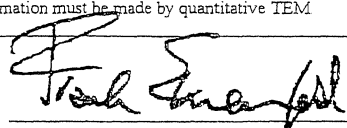
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BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598972	Material Description:	Off-White Sheetrock		
Client No.:	CL1015-A43	Location:	RoomB2;HoleInCeiling LeadingToFloorAbove		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	25	Cellulose	75	
Joint Compound					
Provided Separately					

Lab No.	1598973	Material Description:	White Joint Compound		
Client No.:	CL1015-A44	Location:	RoomB2;AboveDoorway		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598974	Material Description:	BlackFloorTileMastic		
Client No.:	CL1015-A45	Location:	Room B3; Center		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 4.6	Chrysotile	None Detected	None Detected	PC 95.4	

Lab No.	1598975	Material Description:	Tan Floor Tile		
Client No.:	CL1015-A46	Location:	Room B3; Center	9x9	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	
Mastic					
Provided Separately					

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BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598976	Material Description:	Grey Paper	
Client No.:	CL1015-A47	Location:	B14; Ceiling	N.W.Corner
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	95	Cellulose	5

Lab No.	1598977	Material Description:	Tan Floor Mastic	
Client No.:	CL1015-A48	Location:	UnderRubberFlooring	In B13 Stair Landing
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.	1598978	Material Description:	BrownCovebaseMastic	
Client No.:	CL1015-A49	Location:	B13; W.Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.	1598979	Material Description:	Grey/Red	
Client No.:	CL1015-A50	Location:	Vinyl Sheet Flooring	YelwMastic;B13;WWall
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

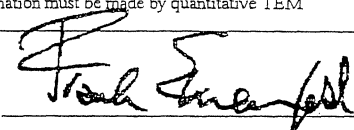
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BULK SAMPLE ANALYSIS SUMMARY

Lab No. 1598979 Material Description: Grey/Red
Client No.: CL1015-A50 Location: Vinyl Sheet Flooring YelwMastic;B13;WWall

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100
Yellow Mastic				
From Above				

Lab No. 1598980 Material Description: Tan/Brown
Client No.: CL1015-A51 Location: Stair Tread Mastic B13; W.Stairwell

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No. 1598981 Material Description: Black Mastic
Client No.: CL1015-A52 Location: E.Wall Of Room B6

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Cellulose	100

Lab No. 1598982 Material Description: Grey Flue Cement
Client No.: CL1015-A53 Location: Room B4

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444**

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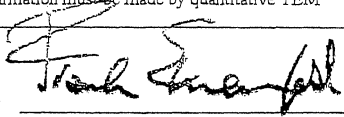
Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed Method not performed unless stated PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM

Analysis Performed By: _____

Date: _____

Approved By: _____


Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/31/2002
Project: NOAA Pribilofs; Clinic, 10-15-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598983	Material Description:	Black Tar Paper		
Client No.:	CL1015-A54	Location:	Main Entry Vestibule W.Wall; S.End		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	70	Cellulose	20	
		10	Hair		

Lab No.	1598984	Material Description:	GreyTransiteShingle		
Client No.:	CL1015-A55	Location:	Main Entry Vestibule W.Wall; S.End		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
20	Chrysotile	None Detected	None Detected	80	

Lab No.	1598985	Material Description:	Brn.StairTreadMastic		
Client No.:	CL1015-A56	Location:	Main Entry Vestibule Stairs At S.End		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598986	Material Description:	GreyTransiteShingle		
Client No.:	CL1015-A57	Location:	Exterior Wall Of Main Entry Vestibule		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
20	Chrysotile	None Detected	None Detected	80	

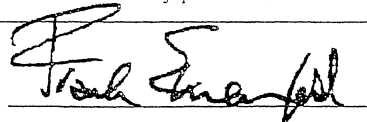
NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*

Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.

Analysis Performed By: _____

Approved By: _____


Frank E. Ehrenfeld, III
Laboratory Director

Date: _____

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/31/2002
Project: NOAA Pribilofs, Clinic, 10-15-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598987	Material Description:	Black Tar Paper		
Client No.:	CL1015-A58	Location:	Exterior Wall Of	Main Entry Vestibule	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	80	Cellulose	20	

Lab No.	1598988	Material Description:	Black Shingle		
Client No.:	CL1015-A59	Location:	Roof, S.Edge		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	15	Fibrous Glass	85	

Received wet.

Lab No.	1598989	Material Description:	Grey/Black Shingle		
Client No.:	CL1015-A60	Location:	Roof, Above Pharmacy		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	15	Fibrous Glass	85	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444**

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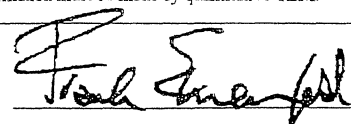
Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.

Analysis Performed By: _____

Date: _____

Approved By: _____

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/31/2002
Project: NOAA Pribilofs; Clinic, 10-16-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598990	Material Description:	Tan/Grey Fibrous		
Client No.:	CL1016-A61	Location:	Floor Of StorageRoom	W. Of 2-1	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	15	Hair	5	
		80	Cellulose		

Lab No.	1598991	Material Description:	White Joint Compound		
Client No.:	CL1016-A62	Location:	Room 2-1; N.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598992	Material Description:	White Vinyl Sheet Floor		
Client No.:	CL1016-A63	Location:	Yellow Mastic	Room 2-4 Behind Door	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	25	Cellulose	70	
		5	Fibrous Glass		

Lab No.	1598992	Material Description:	White Vinyl Sheet Floor		
Client No.:	CL1016-A63	Location:	Yellow Mastic	Room 2-4 Behind Door	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	
Yellow Mastic					
From Above					

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*

Analysis Method: EPA 600/R-93/116

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Analysis Performed By: _____

Date: _____

Approved By: _____

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/31/2002
Project: NOAA Pribilof's; Clinic, 10-16-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598993	Material Description:	Tan/Brown		
Client No.:	CL1016-A64	Location:	Covebase Mastic	Room2-4 BehindDoor	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598994	Material Description:	White Sheetrock		
Client No.:	CL1016-A65	Location:	Room 2-7; E.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	2	Fibrous Glass	98	
Joint Compound		Trace	Cellulose		
Provided Separately					

Lab No.	1598995	Material Description:	White Joint Compound		
Client No.:	CL1016-A66	Location:	Room 2-7; E.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1598996	Material Description:	Tan Flooring Mastic		
Client No.:	CL1016-A67	Location:	Room 2-7; E.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

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Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.

Analysis Performed By: _____

Date: _____

Approved By: _____

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/31/2002
Project: NOAA Pribilofs; Clinic, 10-16-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598997	Material Description:	Black Tar		
Client No.:	CL1016-A68	Location:	RoofSealant; Outside	E.Window Of Room 2-7	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	10	Cellulose	90	

Lab No.	1598998	Material Description:	Black Tar Paper		
Client No.:	CL1016-A69	Location:	Under Cement Shingle	On Ext. Wall Of 2-12	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	80	Cellulose	20	

Lab No.	1598999	Material Description:	Brown GCT Mastic		
Client No.:	CL1016-A70	Location:	Room2-10; N.E. Corner		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	2	Other	98	

Lab No.	1599000	Material Description:	Tan Ceiling Tile		
Client No.:	CL1016-A71	Location:	Room 2-10	N.E. Corner	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	97	Cellulose	3	

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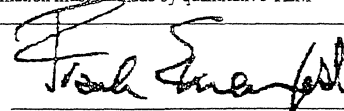
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Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated

10928 Eagle River Rd., Ste 202

Eagle River AK 99577

Report Date: 10/31/2002**Project:** NOAA Pribilofs; Clinic, 10-16-02**Project No.:** 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1599001	Material Description:	White Sheetrock		
Client No.:	CL1016-A72	Location:	Room 2-10	N.E. Corner	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	Trace	Cellulose	97	
No Joint Compound		3	Fibrous Glass		

Lab No.	1599002	Material Description:	Grey Floor Tile		
Client No.:	CL1016-A73	Location:	Black Mastic; 12x12	Closet; SECorner2-10	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
PC 2.2	Chrysotile	None Detected	None Detected	PC 97.8	

Lab No.	1599002	Material Description:	Grey Floor Tile		
Client No.:	CL1016-A73	Location:	Black Mastic; 12x12	Closet; SECorner2-10	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	Trace	Cellulose	100	
Black Mastic					
From Above					

Lab No.	1599003	Material Description:	BrownCovebaseMastic		
Client No.:	CL1016-A74	Location:	S.Wall Of Room 2-10		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*Analysis Method: EPA 600/R-93/116

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Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577

Report Date: 10/31/2002
Project: NOAA Pribilofs; Clinic, 10-16-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1599004	Material Description:	Off-White Caulk		
Client No.:	CL1016-A75	Location:	Sink Undercoating	Room 2-11	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
10	Chrysotile	None Detected	None Detected	90	

Lab No.	1599005	Material Description:	White Sheetrock		
Client No.:	CL1016-A76	Location:	Room 2-12; E.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	3	Fibrous Glass	97	
Joint Compound					
Provided Separately					

Lab No.	1599006	Material Description:	White Joint Compound		
Client No.:	CL1016-A77	Location:	Room 2-12; E.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1599007	Material Description:	Pink Caulk		
Client No.:	CL1016-A78	Location:	Sink Undercoating	Room 2-22; W.Wall	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
10	Chrysotile	None Detected	None Detected	90	

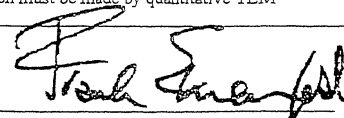
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Eagle River AK 99577

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Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1599008	Material Description:	White Joint Compound		
Client No.:	CL1016-A79	Location:	Room 2-23; E.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

Lab No.	1599009	Material Description:	Tan/White Sheetrock		
Client No.:	CL1016-A80	Location:	Hatch Above 2-22		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	Trace	Fibrous Glass	20	
No Joint Compound		80	Cellulose		

Lab No.	1599010	Material Description:	Tan/White Sheetrock		
Client No.:	CL1016-A81	Location:	Hatch Above 2-25		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	90	Cellulose	10	
No Joint Compound		Trace	Fibrous Glass		

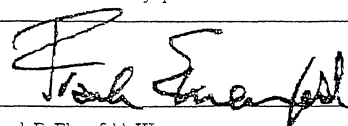
Lab No.	1599011	Material Description:	White Joint Compound		
Client No.:	CL1016-A82	Location:	Room 2-20; N.Wall		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
None Detected	None Detected	None Detected	None Detected	100	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444**

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Analysis Performed By: _____**Approved By:** _____Frank E. Ehrenfeld, III
Laboratory Director**Date:** _____

EMSL Analytical

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: 8568589551 Email: gmiller1@emsl.com

EMSL

Attn: Brian L. Morgan
Environmental Health Sciences-Alaska,
10928 Eagle River Road
Suite 202
Eagle River, AK 99577-8052

Fax: (907) 694-1382 Phone: 907-694-1383

Project: NOAA Probiolofs Survey / Clinic /# 5766-01

Customer ID: ENVI04

Customer PO:

Received: 10/18/02 12:25 PM

EMSL Order: 200210317

EMSL Project ID:

Toxicity Characteristic Leaching Procedure (SW846, 1311/7420)

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Analyzed</i>	<i>Lead Concentration</i>	<i>Notes</i>
Clinic-tclp1	0001		<0.4 mg/L	



Gerold J. Miller, Ph.D.

Laboratory Director

NJ-NEIAP: 04653

AIHA: 100194

or other approved signatory



EHS ALASKA
INCORPORATED

EHS-Alaska, Inc.

20140317

10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

CHAIN OF CUSTODY RECORD/FIELD SURVEY DATA

Page 1 of 1

FIELD COLLECTION DATE: 10-15-02

JOB #: 5766-01

MATERIAL TYPE:(Circle)
ASBESTOS LEAD

TOTAL
QUANTITIES: 1

PROJECT NAME: NOAA Pribilofs Survey.

BULK ANALYSIS
REQUESTED:

☐ PLM

☐ PLM DUST

☐ TEM BULK

☒ LEAD TCLP

☐ LEAD PPM

FACILITY: Clinic

DISPOSAL: Normal

TURNAROUND: 5 Day

SPECIAL INSTRUCTIONS:

B. Morgan
COLLECTED BY (signature)

Brian Morgan

PRINTED NAME

T-7577-8

CERT#

AHERA#

FedEx

SHIPPING METHOD

8358 1481470

COURIER (signature)

DATE/TIME 10/17/02

EMSL

SELECTED LABORATORY

L. Velazquez

SAMPLES ACCEPTED BY

1-1/18/02 12:5 pm

DATE/TIME

ANALYST'S SIGNATURE

DATE

COMMENTS:

SAMPLE ID

SAMPLE DESCRIPTION,
(COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)

LOCATION/COMMENTS
(INCLUDING PHOTO/REF)

RESULTS

Clinic-tclp1

Miscellaneous building materials

Various

END

Lead Paint Screening Clinic

No	Site	Inspector	Room	Structure	Substrate	Feature	Condition	Color	Ssec	Date/Time	Depth Index	Results LBP	Results mg/cm ²
1			Shulter Cal	1					60.4	10/16/02 10:50	0 ...	NA	
2			Calibrate						3.1	10/16/02 10:50	1 NEG	0.01	
3			Calibrate						5.1	10/16/02 10:50	1 NEG	0.3	
4			Calibrate						22	10/16/02 10:50	1 POS	1.03	
5			Calibrate						9.1	10/16/02 10:51	1 POS	1.59	
6			Calibrate						22.1	10/16/02 10:52	1.3 POS	3.22	
7			Calibrate						3.2	10/16/02 10:53	1 NEG	0	
8			Calibrate						21.7	10/16/02 10:53	1 NEG	0	
9			Calibrate						40.1	10/16/02 10:54	9.8 NEG	0.35	
10			Calibrate						14.8	10/16/02 10:56	1 NEG	0	
11			Calibrate						12.4	10/16/02 10:56	1 NEG	0	
12			Room						14.7	10/16/02 10:58	1 NEG	0	
13			Room			Door	Intact	White	10.1	10/16/02 10:59	9.9 POS	3.97	
14			Room				Intact	White	21.7	10/16/02 11:00	1.8 NEG	0.02	
15			Room				Intact	White	21.8	10/16/02 11:01	1 NEG	0	
16			Room				Intact	White	7.8	10/16/02 11:01	1 NEG	0	
17			Room				Intact	White	3.2	10/16/02 11:02	1 NEG	0	
18			Room				Intact	White	19.3	10/16/02 11:02	1 NEG	0	
19			Room				Intact	White	12.4	10/16/02 11:04	1 NEG	-0.44	
20			Room			Door	Intact	White	3	10/16/02 11:05	1.2 NEG	0.01	
21			Room				Intact	White	10.1	10/16/02 11:05	1 POS	4.39	
22			Room				Intact	White	17.2	10/16/02 11:07	1 NEG	-0.61	
23			Room				Intact	White	21.8	10/16/02 11:07	1 NEG	0	
24			Room			Door	Intact	Yellow	5.4	10/16/02 11:08	7.5 POS	9.88	
25			Room				Intact	White	16.8	10/16/02 11:09	6.7 NEG	0.31	
26			Room			Rail cap	Intact	Green	3.1	10/16/02 11:11	1 NEG	0	
27			Room				Intact	White	2.8	10/16/02 11:11	2.2 POS	20.42	
28			Room				Intact	White	4.6	10/16/02 11:12	2 POS	14.44	
29			Room			Door	Intact	Green	2.8	10/16/02 11:12	2.6 POS	34.43	
30			Room				Intact	White	2.7	10/16/02 11:13	2.9 POS	21.35	
31			Room				Intact	White	5.6	10/16/02 11:13	1 NEG	0	
32			Room				Intact	Green	21.8	10/16/02 11:14	1.1 NEG	0.01	
33			Room				Intact	Blue	21.7	10/16/02 11:15	1 NEG	0.01	
34			Room			Tread	Intact	Green	21.3	10/16/02 11:17	3.5 NEG	0.6	
35			Room				Intact	White	3.2	10/16/02 11:18	7.9 POS	13.67	
36			Room				Intact	White	12.4	10/16/02 11:18	1 NEG	-0.28	
37			Room				Intact	White	3.2	10/16/02 11:19	10 POS	11	
38			Room			Door	Intact	White	23.8	10/16/02 11:19	7.5 NEG	0.42	
39			Room			Sash	Intact	White	3.1	10/16/02 11:20	1 NEG	0.01	
40			Room			Baseboard	Intact	White	3.2	10/16/02 11:21	1 NEG	0	
41			Room			Sash	Intact	White	3.1	10/16/02 11:22	1 NEG	0	
42			Room				Intact	White	12.4	10/16/02 11:22	1 NEG	0	
43			Room			Sash Ext	Intact	Blue	5.3	10/16/02 11:23	1.1 NEG	0.05	
44			Room			Sash Ext	Intact	Blue	3.1	10/16/02 11:23	1 NEG	0.03	
45			Room			Door	Intact	White	5	10/16/02 11:24	3.2 NEG	0.03	
46			Room				Intact	White	3.2	10/16/02 11:25	1 NEG	0	

No	Site	Inspector	Room	Structure	Substrate	Feature	Condition	Color	Ssec	Date/Time	Depth Index	Results LBP	Results mg/cm ²
47			Room	Wall	Drywall		Intact	White	10.1	10/16/2002 11:25	1	NEG	0
48			Room	Wall	Drywall		Intact	White	7.8	10/16/2002 11:25	1	NEG	0
49			Room	Window	Wood	Sash	Intact	White	3.1	10/16/2002 11:26	1	NEG	0.01
50			Room	Wall	Drywall		Intact	White	5.5	10/16/2002 11:26	1	NEG	0
51			Room	Door	Wood	Door	Intact	Brown	3.2	10/16/2002 11:27	1	NEG	0
52			Room	Wall	Metal	Baseboard	Intact	White	3.1	10/16/2002 11:27	1	NEG	0
53			Room	Wall	Drywall		Intact	White	5.5	10/16/2002 11:28	1	NEG	0
54			Room	Wall	Drywall		Intact	White	21.7	10/16/2002 11:28	1	NEG	0
55			Room	Wall	Metal	Baseboard	Intact	White	3.2	10/16/2002 11:29	1	NEG	0
56			Room	Ceiling	Drywall		Intact	White	7.2	10/16/2002 11:29	2.5	POS	8.48
57			Room	Wall	Drywall		Intact	White	5.5	10/16/2002 11:30	1	NEG	0
58			Room	Ceiling	Drywall		Intact	White	5.5	10/16/2002 11:30	1	NEG	0
59			Room	Ceiling	Drywall		Intact	White	14.7	10/16/2002 11:30	8.7	NEG	0.24
60			Room	Wall	Drywall		Intact	White	14.8	10/16/2002 11:31	1.5	NEG	-0.37
61			Room	Ceiling	Drywall		Intact	White	14.8	10/16/2002 11:32	5	NEG	-0.17
62			Room	Stairs	Wood	Rail cap	Intact	White	3.1	10/16/2002 11:33	1	NEG	0
63			Room	Wall	Wood		Poor	White	3.2	10/16/2002 11:48	2.1	NEG	0.02
64			Room	Door	Wood	Casing	Poor	White	3.1	10/16/2002 11:48	1	NEG	0
65			Room	Wall	Concrete		Poor	White	21.4	10/16/2002 11:49	1.5	NEG	0.06
66			Room	Wall	Concrete		Poor	White	14.8	10/16/2002 11:50	1	NEG	-0.78
67			Room	Window	Wood	Sash Ext	Poor	Blue	3.1	10/16/2002 11:51	1	NEG	0.01
68			Calibrate									NEG	0
69			Calibrate									POS	1.08
70			Calibrate									POS	1.76

Table Heading Descriptions:

Ssec: This is the nominal time in seconds that each sample was analyzed.

Depth Index: Indicates the relative depth of the lead. A Depth Index (DI) of less than 1.5 indicates lead very near the surface layer of paint. A DI between 1.5 and 4.0 indicates moderately covered lead. A DI greater than 4.0 indicates the lead paint is deeply buried beneath multiple layers of paint.

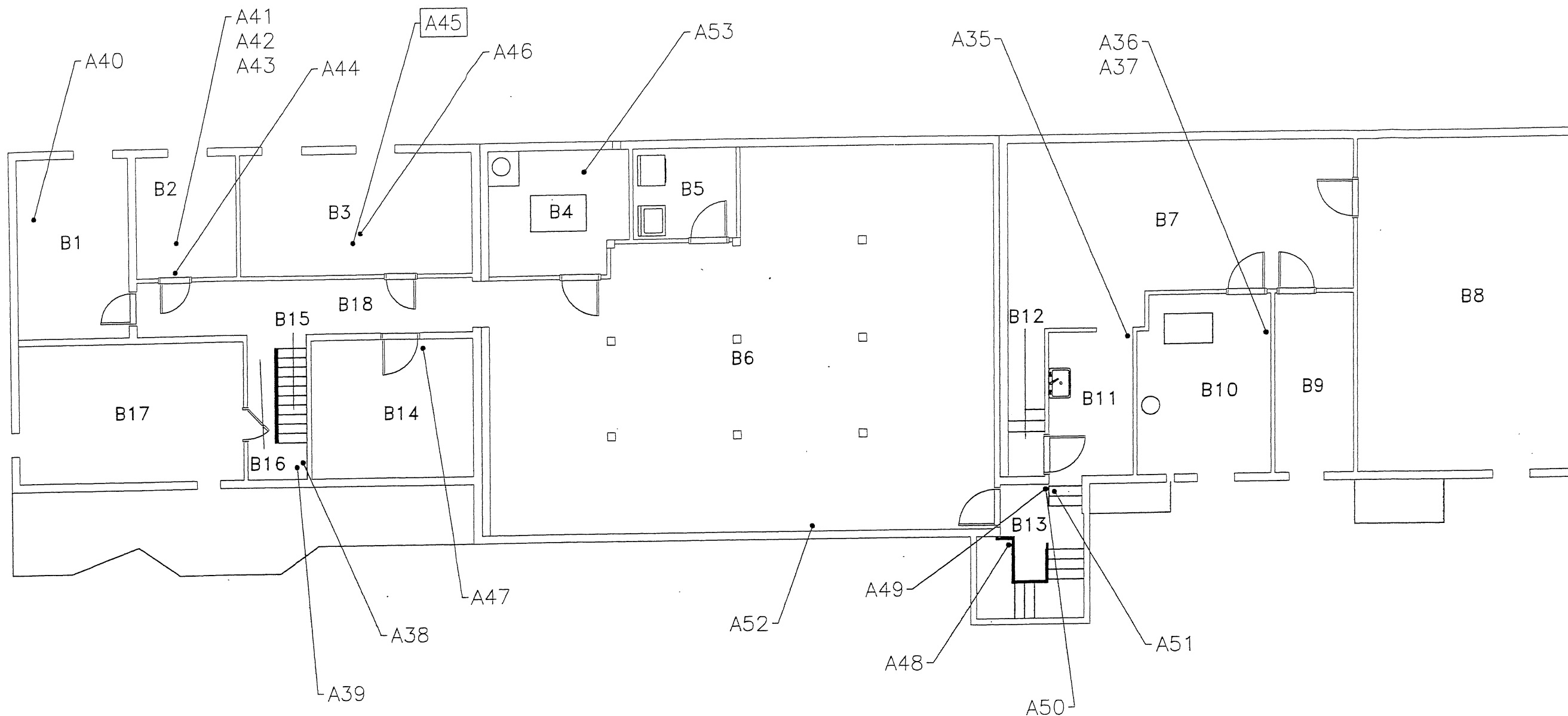
LBP: Results are shown as positive (POS ≥ 1.0 mg/cm²), inconclusive (INC) or negative (NEG < 1.0 mg/cm²). The results are based on the combined results of the K and L shell readings. L shell and K shell readings are not provided. Positive results are also in bold print.

mg/cm²: This is the testing results produced by the NITON XL-309 instrument in milligrams of lead per square centimeter (mg/cm²). The EPA defines lead based paint as paint containing lead at 1.0 mg/cm² or greater. A negative number is a result of an internal computation made by the instrument and should be interpreted as zero. Even though paint may be termed negative (less than 1.0 mg/cm) by EPA definition, disturbance of the paint may still be regulated by OSHA under 29 CFR 1926.62. Where lead is present at any level, appropriate engineering controls, work practices and personal protective equipment should be used until a negative exposure assessment can be determined.

VOID: This indicates that the test was intentionally terminated by the operator due to operator error (e.g. - operator moved analyzer while testing).

APPENDIX B

Sketches of Sample Locations



LEGEND

- AXX ASBESTOS SAMPLE LOCATION
- AXX SAMPLE LOCATION THAT CONTAINED ASBESTOS

2
A1 BASEMENT LEVEL FLOOR PLAN
SCALE: 3/32"=1'-0"



**PRIBILOF ISLAND
CLINIC SURVEY
SAMPLE LOCATIONS
SURVEY DATE 10/4/2002**

PROJECT NO.
5766-01

DESIGNED:

DRAWN:
FCW

CHECKED:
BLM

SCALE:
NTS

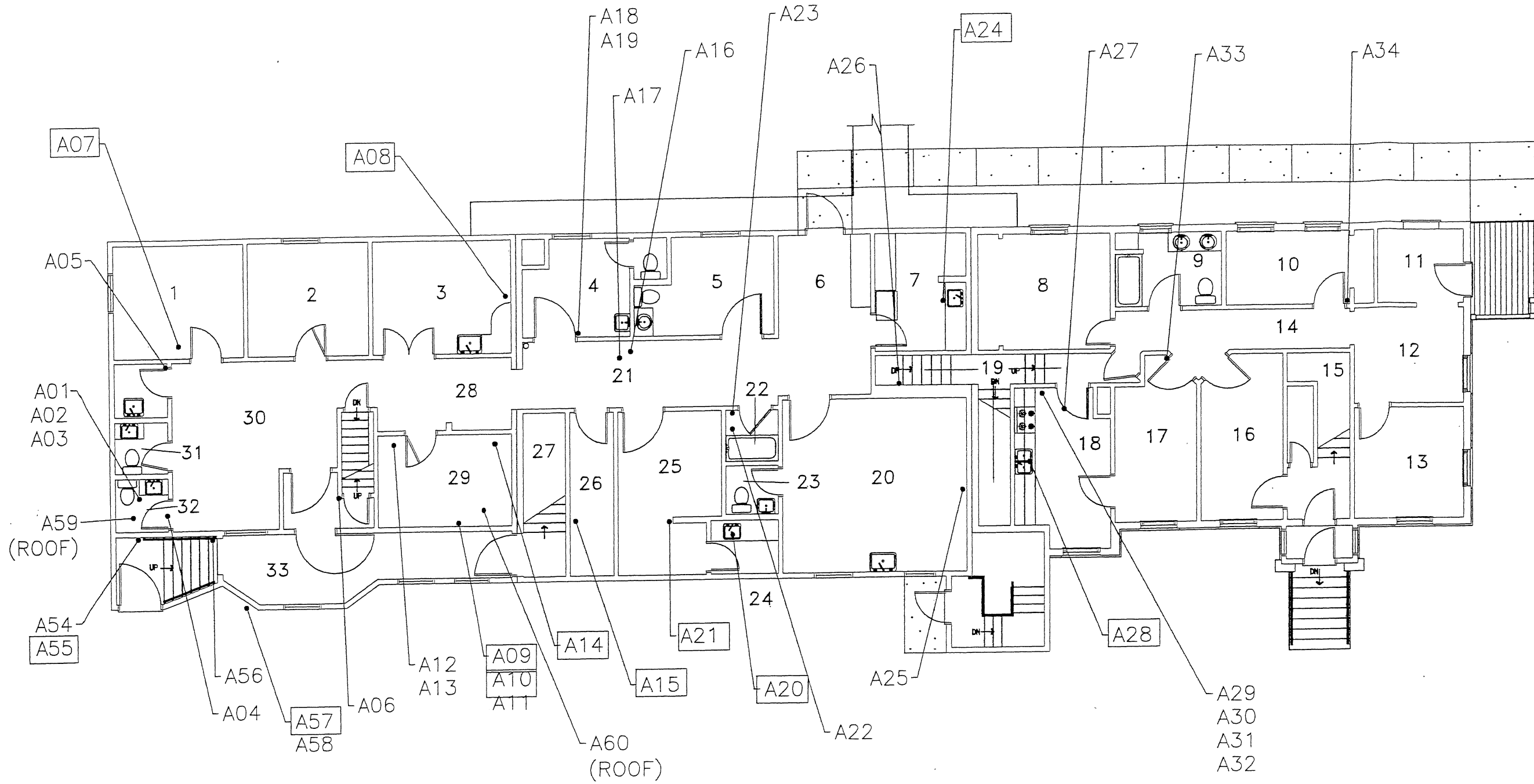
DWG. TITLE:
5766-SL1

JOB No.
5766

DATE:
10/19/02

SL-1

of **3**



LEGEND

- — AXX ASBESTOS SAMPLE LOCATION
- — AXX POSITIVE ASBESTOS SAMPLE LOCATION

1 MAIN LEVEL FLOOR PLAN
A1 SCALE: 1/32"=1'-0" 4,370 SQ. FT.

**PRIBILOF ISLAND
CLINIC SURVEY
SAMPLE LOCATIONS
SURVEY DATE 10/4/2002**

PROJECT NO.
5766-01

DESIGNED:

DRAWN:
FCW

CHECKED:
BLM

SCALE:
NTS

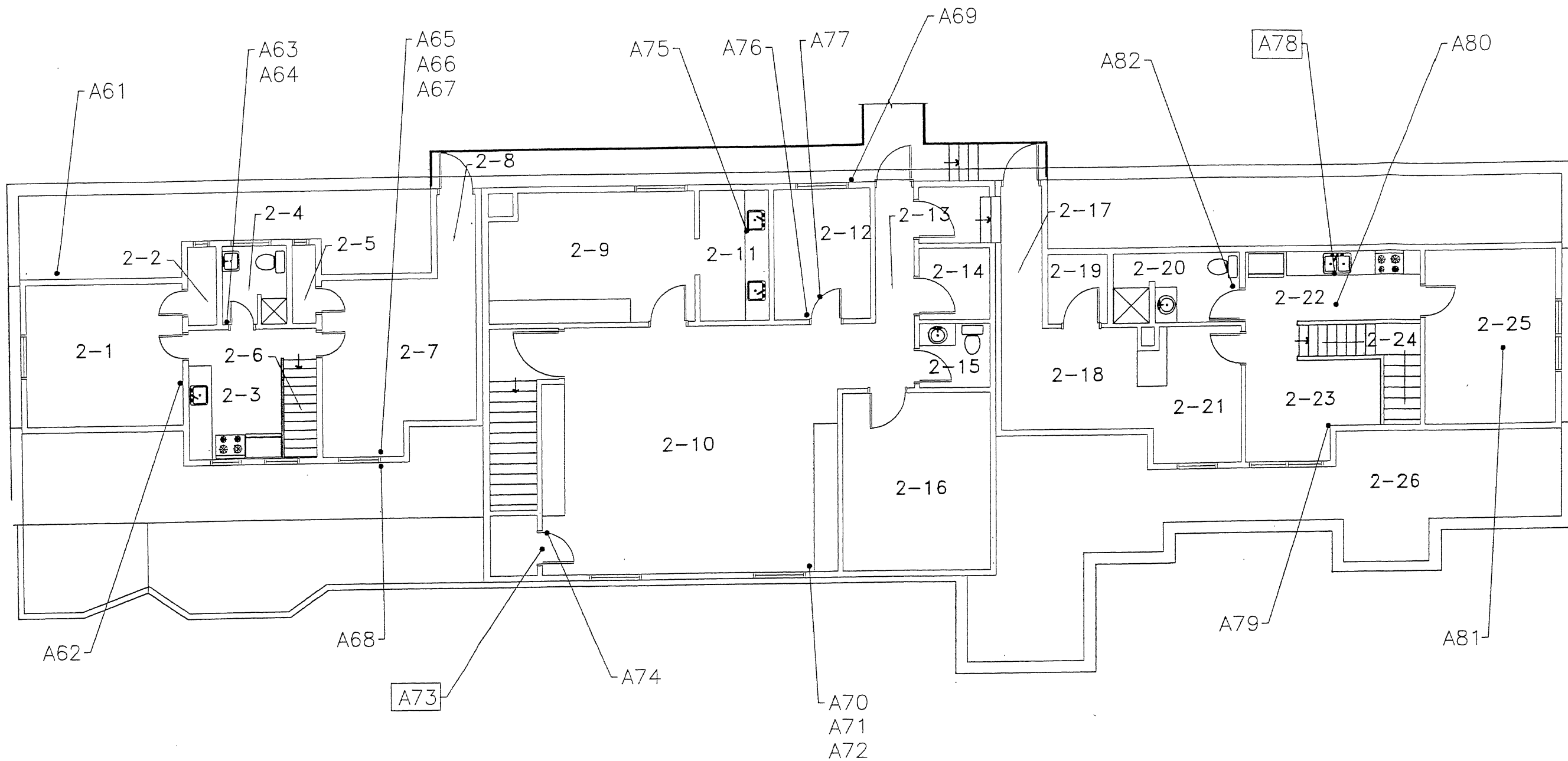
DWG. TITLE:
5766-SL2

JOB No.
5766

DATE:
10/19/02

SL-2

of **3**



1 UPPER LEVEL FLOOR PLAN
A2 SCALE: 3/32"=1'-0"



LEGEND

- AXX ASBESTOS SAMPLE LOCATION
- AXX POSITIVE ASBESTOS SAMPLE LOCATION

**PRIBILOF ISLAND
CLINIC SURVEY
SAMPLE LOCATIONS
SURVEY DATE 10/4/2002**

PROJECT NO.
5766-01

DESIGNED:

DRAWN: **FCW**

CHECKED:

BLM

SCALE:

NTS

DWG. TITLE:

5766-SL3

JOB No.

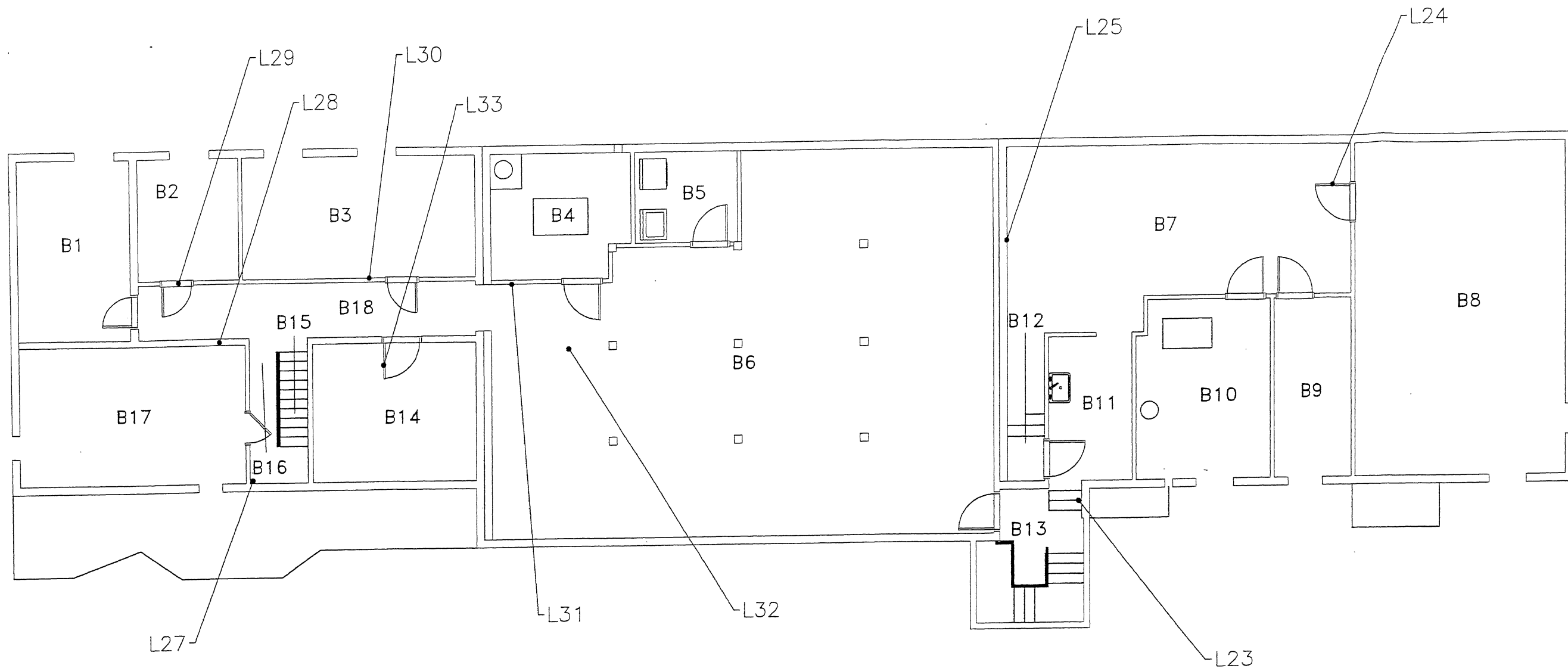
5766

DATE:

10/19/02

SL-3

of **3**



LEGEND

- LXX LEAD SAMPLE LOCATION
- LXX POSITIVE LEAD SAMPLE LOCATION



2 BASEMENT LEVEL FLOOR PLAN

A1 SCALE: 3/32"=1'-0"



PRIBILOF ISLAND CLINIC SURVEY LEAD SAMPLE LOCATIONS SURVEY DATE 10/4/2002

PROJECT NO.
5766-01

DESIGNED:

DRAWN:
FCW

CHECKED:
BLM

SCALE:
NTS

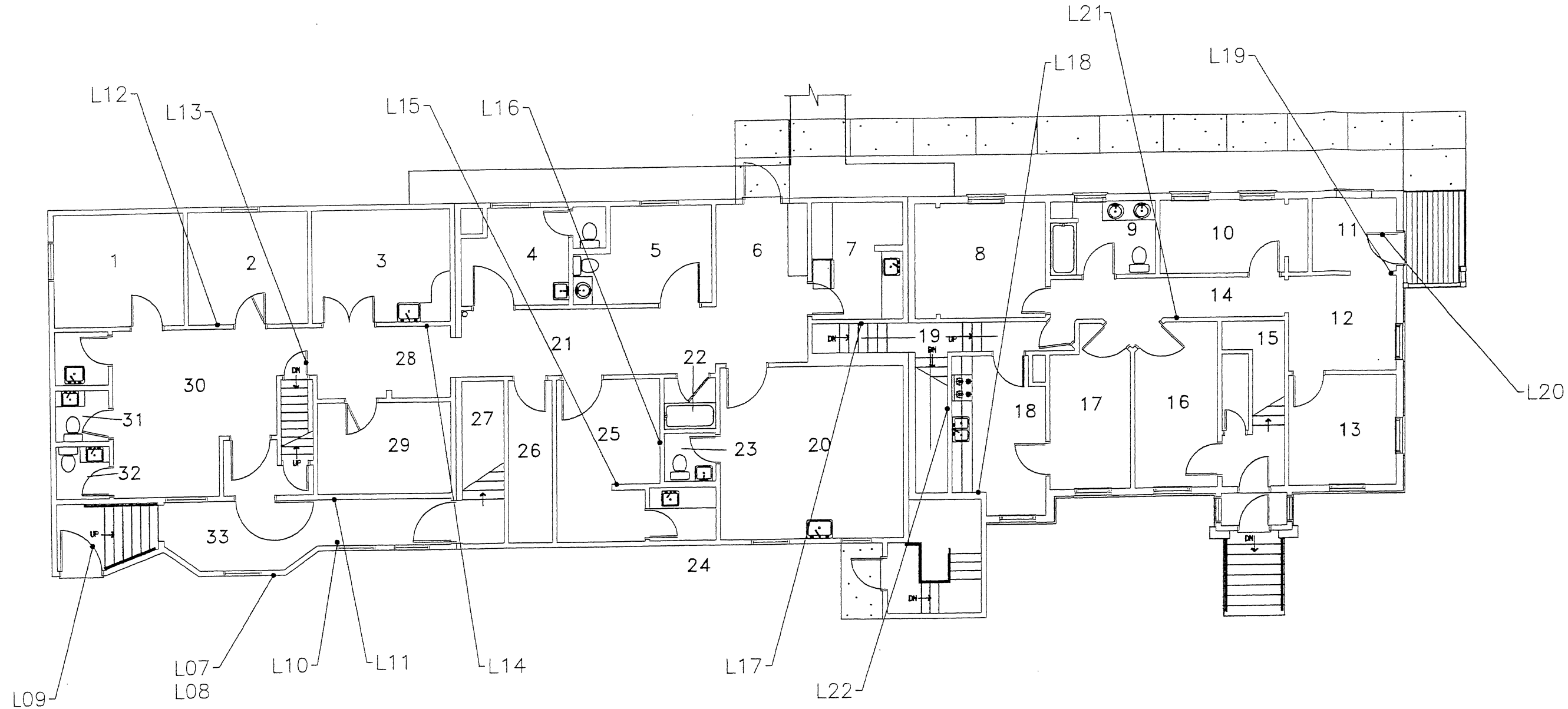
DWG. TITLE:
5766-L-SL1

JOB No.
5766

DATE:
10/19/02

SL-1

of 3



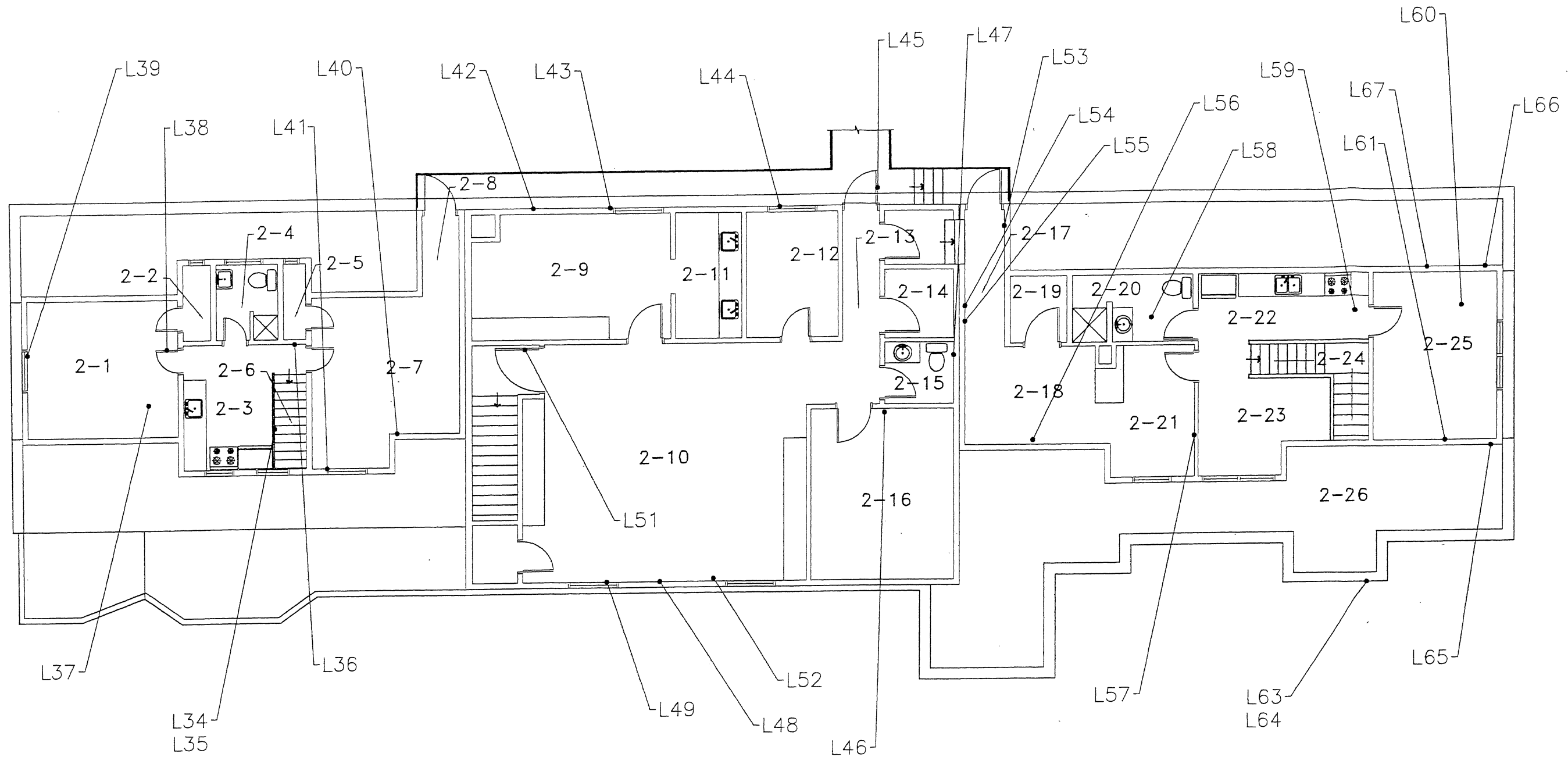
LEGEND

- LXX LEAD SAMPLE LOCATION
- LXX POSITIVE LEAD SAMPLE LOCATION



**PRIBILOF ISLAND
CLINIC SURVEY
LEAD SAMPLE LOCATIONS
SURVEY DATE 10/4/2002**

PROJECT NO. 5766-01
DESIGNED:
DRAWN: FCW
CHECKED: BLM
SCALE: NTS
DWG. TITLE: 5766-L-SL2
JOB No. 5766
DATE: 10/19/02
SL-2
of 3



1 UPPER LEVEL FLOOR PLAN
A2 SCALE: 3/32"=1'-0"



LEGEND

- LXX LEAD SAMPLE LOCATION
- LXX POSITIVE LEAD SAMPLE LOCATION

**PRIBILOF ISLAND
CLINIC SURVEY
LEAD SAMPLE LOCATIONS
SURVEY DATE 10/4/2002**

PROJECT NO. 5766-01
DESIGNED:
DRAWN: FCW
CHECKED: BLM
SCALE: NTS
DWG. TITLE: 5766-L-SL3
JOB No. 5766
DATE: 10/19/02
SL-3
of 3

HAZARDOUS MATERIALS REMOVAL COST SUMMARY										
PROJECT:	CLINIC									
LOCATION:	St Paul Island, Alaska									
BASIC HAZARDOUS MATERIAL REMOVAL COSTS (Includes Labor):										
ASBESTOS CONTAINING MATERIAL REMOVAL										
OTHER HAZARDOUS MATERIALS REMOVAL										
		TOTAL REMOVAL COSTS:								
BASIC SUPPORT COSTS:										
	QTY UNIT	COST PER UNIT								
PROJECT DESIGNER FEE:	1 EA @	\$500 LUMP								
MEALS (7 pers.) FOR MOB/DEMOB DAYS:	2 DAYS @	\$350 DAY								
MEALS (7 pers) DURING PROJECT WORK:	10 DAYS @	\$350 DAY								
RT AIRFARE TO SITE (7 pers.):	7 EA @	\$900 TICKET								
TRAVEL DAY LABOR COSTS (6 pers.crew):	2 DAYS @	\$1,920 DAY								
AIR MONITORING PERSON:	10 DAYS @	\$425 DAY								
TRAVEL DAY LABOR COST (air mon. pers.):	2 DAYS @	\$425 DAY								
SHIPPING OF SUPPLIES (to St Paul):	1 LOT @	\$5,000 LUMP								
		TOTAL SUPPORT COSTS:								
<table style="width: 100%;"> <tr> <td style="width: 50%;">TOTAL BASIC COSTS:</td> <td style="width: 50%;">(REMOVAL & SUPPORT)</td> </tr> <tr> <td>LOCATION ADJUSTMENT:</td> <td>INDEX = @ 1.10</td> </tr> <tr> <td>CONTINGENCY:</td> <td>PERCENT= @ 5</td> </tr> <tr> <td colspan="2" style="border: 1px solid black; text-align: right;">TOTAL BASIC COST ADJUSTED:</td> </tr> </table>			TOTAL BASIC COSTS:	(REMOVAL & SUPPORT)	LOCATION ADJUSTMENT:	INDEX = @ 1.10	CONTINGENCY:	PERCENT= @ 5	TOTAL BASIC COST ADJUSTED:	
TOTAL BASIC COSTS:	(REMOVAL & SUPPORT)									
LOCATION ADJUSTMENT:	INDEX = @ 1.10									
CONTINGENCY:	PERCENT= @ 5									
TOTAL BASIC COST ADJUSTED:										
OTHER COSTS:										
INSURANCE	3.1 PCT									
BONDING	3.0 PCT									
OFFICE OVERHEAD	10.0 PCT									
PROFIT	10.0 PCT									
		TOTAL OTHER COSTS:								
TOTAL ESTIMATED SITE PROJECT COST :										

NOTE: This is not a formal cost proposal. These costs are approximate, are based on general industry standards, and are based on information collected during the surveys, as well as information available at the time of preparation of this estimate. The costs will vary greatly depending on a number of factors, including the amount of material removed from each area (smaller amount = lower cost efficient), whether one building or all three are done simultaneously, whether or not the local landfill is permitted to accept waste (etc.).

The following assumptions have been used in assigning a dollar amount to the asbestos removal subtotal:

- 1) 1 supervisor and 5 workers for each building; plus one air monitoring person
- 2) each building will be dealt with without regard to the other two buildings
- 3) one day travel each way to and from site for each person for each building
- 4) 10 work days each for staff quarters and clinic, 5 work days for lab building
- 5) Government to provide lodging for all personnel
- 6) Meal rate of \$50/day per individual for duration of project
- 7) asbestos waste allowed to be disposed of on St Paul Island

HAZARDOUS MATERIALS SURVEY - HEALTH CLINIC BUILDING
ST. PAUL ISLAND, ALASKA

\$71,750
\$8,890
\$80,640
TOTAL COST
\$500
\$700
\$3,500
\$6,300
\$3,840
\$4,250
\$850
\$5,000
\$24,940
\$105,580
\$116,138
\$5,807
\$121,945
\$3,800
\$3,700
\$12,200
\$12,200
\$31,900
\$153,845

are based on
the removal cost:
amounts are not as
accept asbestos

Estimate of costs for removal of miscellaneous hazardous items from three buildings on St Paul Island

Material	unit	Cost	Clinic		Staff qtrs		Lab admin	
			Quantity	extended price	Quantity	extended price	Quantity	extended price
PCB ballasts	EA	\$40	150	\$6,000	40	\$1,600	65	\$2,600
Mercury bulbs	EA	\$2.50	300	\$750	80	\$200	160	\$400
radioactive signs	EA	\$200	3	\$600		\$0		\$0
mercury thermostat	EA	\$125	8	\$1,000		\$0		\$0
emer lites w/batteries	EA	\$30	18	\$540		\$0		\$0
Subtotal ***				\$8,890		\$1,800		\$3,000

*** Removal/disposal costs for miscellaneous items includes all costs for removal/disposal (assuming personnel are already on site for asbestos removal).



Photo 1: Clinic Building



Photo 2: Asbestos containing 9x9 gray floor tiles (FT1), located under non-asbestos containing sheet vinyl in main clinic area. Sample A07.



Photo 3: Asbestos containing black floor tile mastic in basement. Sample A45.



Photo 4: White asbestos containing cement siding shingles on original portions of clinic building. Samples A55 and A57.



Photo 5: Main clinic area, showing sheet vinyl, under which lies asbestos containing floor tiles (see Photo 2).

ASBESTOS SURVEY

For

**NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
PRIBILOF FACILITIES
ST. PAUL, ALASKA**

AREA 51 LOT

FINAL REPORT

November 2003

Prepared by:


ENVIRONMENTAL &
INSTRUMENTATION
1611 East 1st Avenue
Anchorage, Alaska 99501

TABLE OF CONTENTS

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4.0	REGULATORY CONSTRAINTS.....	2
4.1	Asbestos-Containing Materials	2

TABLE 1: ASBESTOS SAMPLE SUMMARY TABLE

APPENDIX A: FIELD AND LABORATORY DATA SHEETS

APPENDIX B: SAMPLE LOCATION FIGURE

APPENDIX C: COST ESTIMATE SUMMARY

ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Materials
CFR	Code of Federal Regulations
EHS	EHS Alaska, Inc.
EPA	Environmental Protection Agency
IATL	International Asbestos Testing Laboratories
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NOAA	National Oceanic & Atmospheric Administration
NVLAP	National Voluntary Laboratory Accredited Program
PLM	Polarized Light Microscopy
PSI	PSI Environmental & Instrumentation

1.0 INTRODUCTION

PSI Environmental & Instrumentation (PSI) was contracted by the National Oceanic & Atmospheric Administration (NOAA) to perform hazardous material surveys of several buildings on St. Paul and St George Islands, Alaska. Buildings on St. Paul Island include the NOAA Staff Quarters, the NOAA Laboratory Administration Building, the St. Paul Health Clinic Building, and an area of the lot behind the Staff Quarters Building, called Area 51. This report summarizes the asbestos survey performed at Area 51. The area is adjacent to the Garco Warehouse, behind the Staff Quarters building on NOAA property, located in St Paul. The lot was surveyed for the presence of broken asbestos-containing shingles and debris. A drawing supplied by NOAA indicates that the areas of concern total approximately 842 square meters. Sarah Kenshalo of PSI, accompanied by Brian Morgan of EHS-Alaska, Inc. (EHS) performed an inspection and collected samples of these materials on October 14, 2002. Mr. Morgan (EHS) is a U.S. Environmental Protection Agency (EPA) certified asbestos building inspector.

2.0 SCOPE OF WORK

Personnel walked the areas of concern, and identified and sampled potential asbestos-containing materials (ACM). The purpose of the inspection was to confirm earlier findings that ACM debris was present on the ground surface throughout six previously identified areas within Area 51. Field and laboratory data sheets are included as Appendix A; a figure showing the areas of extent of suspected ACM is included as Appendix B. A summary cost estimate has been prepared for the removal and disposal of identified asbestos from the area, and is included as Appendix C.

3.0 SAMPLING AND ANALYSIS

3.1 Asbestos-Containing Materials

Personnel performed a visual inspection of the suspect area and collected two samples of materials suspected of containing asbestos. One sample (AR51-A01) was collected from material in the fish tote located behind the GARCO building. A second sample (AR51-A02) was collected from the ground area containing the highest concentration of debris. All samples were analyzed for the presence of asbestos by polarized light microscopy (PLM), the method of analysis recommended by the EPA to determine the composition of suspected asbestos-containing materials. International Asbestos Testing Laboratories (IATL), of Mt. Laurel, New Jersey analyzed samples for asbestos content. IATL is a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory. Only materials containing more than 1% total asbestos were classified as "asbestos-containing" based on EPA criteria. Table 1 provides a summary list of all samples collected with analytical results. Chain of Custody Record/Field Survey Data sheets and Laboratory reports are included in Appendix A. A drawing showing sample collection locations and location of areas where shingle fragments have been identified is included as Appendix B.

TABLE 1: ASBESTOS SAMPLING SURVEY

Samples Collected October 14, 2002

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
AR51-A01	Cement Board	Loose in fish tote behind Garco building	15% Chrysotile
AR51-A02	Cement Board	Loose on ground NW of Garco Building	10% Chrysotile

Cement Shingles

The broken cement shingles scattered over the areas identified by NOAA were found to be asbestos-containing. The material was in fair condition and was considered non-friable (not easily crumbled). This material was scattered sporadically over approximately 842 square meters of ground. A few random pieces were noted in areas not previously identified. A portion of the material had been previously picked up and had been placed in a fish tote located behind the GARCO building.

4.0 REGULATORY CONSTRAINTS

4.1 Asbestos-Containing Materials

The EPA regulations issued as Title 40 of the Code of Federal Regulations (CFR), Part 61 (40 CFR 61) under the National Emission Standards for Hazardous Air Pollutants (NESHAP), established procedures for handling ACM during asbestos removal and waste disposal. These regulations require an owner (or the owner's contractor) to notify the EPA of asbestos removal operations and to establish responsibility for the removal, transportation, and disposal of asbestos. The disposal of asbestos waste is regulated by the EPA, the State of Alaska Department of Environmental Conservation, and the disposal site operator. OSHA regulation 29 CFR 1926.1101 requires air monitoring during ACM removal and during demolition to determine the airborne concentrations of asbestos to which workers may be exposed. 29 CFR 1926.1101 also establishes permissible exposure limits, respiratory protection and protective clothing requirements, and establishes standard work practices and engineering controls for asbestos removal. All federal, state and local standards regulating asbestos should be followed during renovations of this building.

APPENDIX A

Bulk Asbestos and TCLP Field Data Sheets, Laboratory Reports and XRF Data

APPENDIX B

Sketches of Sample Locations

APPENDIX C

Abatement Cost Summary

APPENDIX A

Bulk Asbestos and TCLP Field Data Sheets, Laboratory Reports and XRF Data


$$\frac{51}{5.52}$$

10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052
(907) 694-1383 • (907) 694-1382 fax
e-mail • ehsak@ehs-alaska.com

[illegible]

****RETURN A SIGNED COPY OF THIS FORM WITH THE FINAL REPORT TO EHS-ALASKA**** HS-895

IATL International Asbestos
Testing Laboratories

16000 Horizon Way Unit 100 Mt. Laurel, NJ 08054

Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
10928 Eagle River Rd., Ste 202
Eagle River AK 99577**Report Date:** 10/25/2002
Project: NOAA Pribilofs Survey, 10-17-02
Project No.: 5766-01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.	1598847	Material Description:	Grey Transit		
Client No.:	AR51-A01	Location:	Loose In Fish Tote Behind Garco Bldg.		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
15	Chrysotile	None Detected	None Detected	85	

Lab No.	1598848	Material Description:	Grey Transit		
Client No.:	AR51-A02	Location:	Loose On Ground N.W. Of Garco Bldg.		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>	
10	Chrysotile	None Detected	None Detected	90	

NIST-NVLAP No. 1165**NY-DOH No. 11021****AIHA Lab No. 444***This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP or any agency of the U.S. government.*

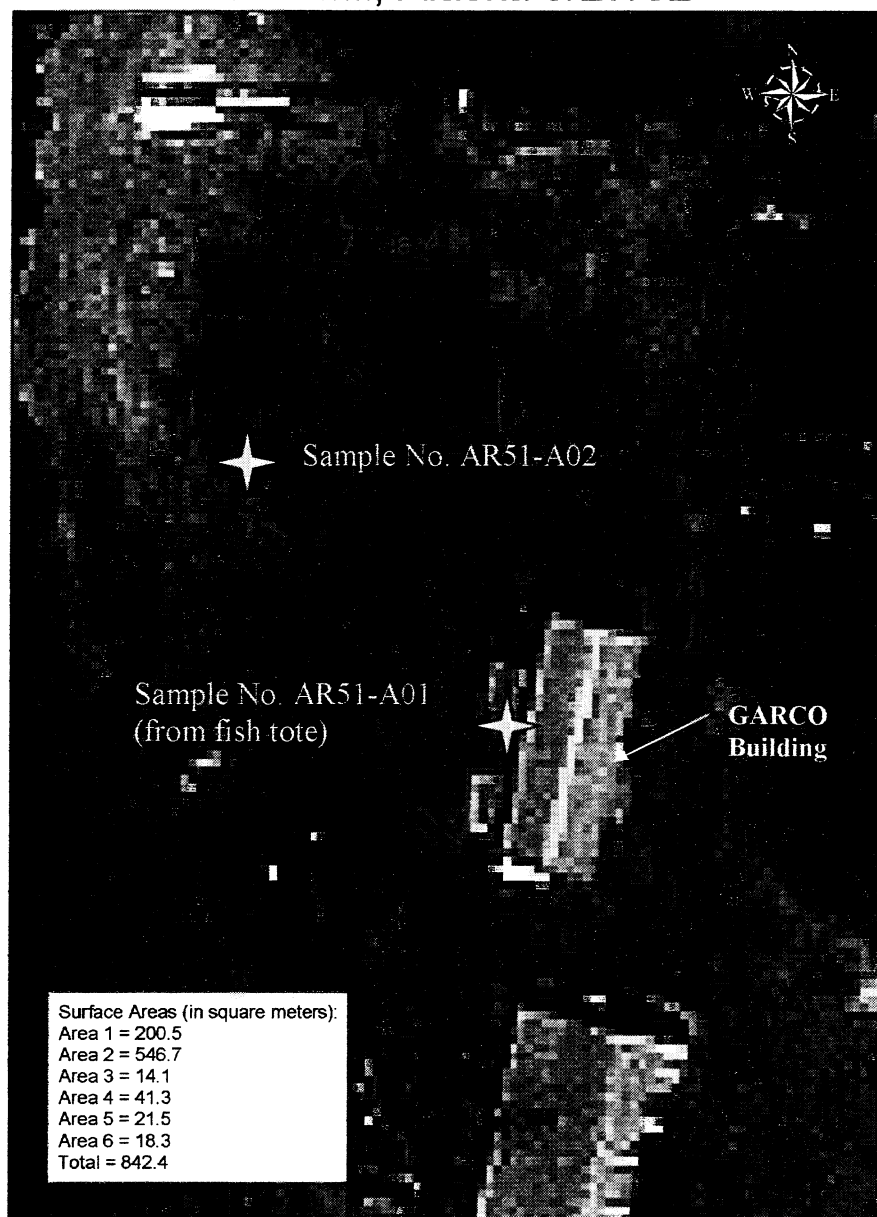
Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. PLM is not consistently reliable in detecting asbestos in floor coverings and similar non friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation must be made by quantitative TEM.**Analysis Performed By:** _____**Approved By:** _____**Date:** _____Frank E. Ehrenfeld, III
Laboratory Director

APPENDIX B

Sketches of Sample Locations

Location of Asbestos Shingles St. Paul, Alaska 9/27/02



20 10 0 20 Meters

NOAA Pribilof Islands GIS Project



APPENDIX C

Abatement Cost Summary

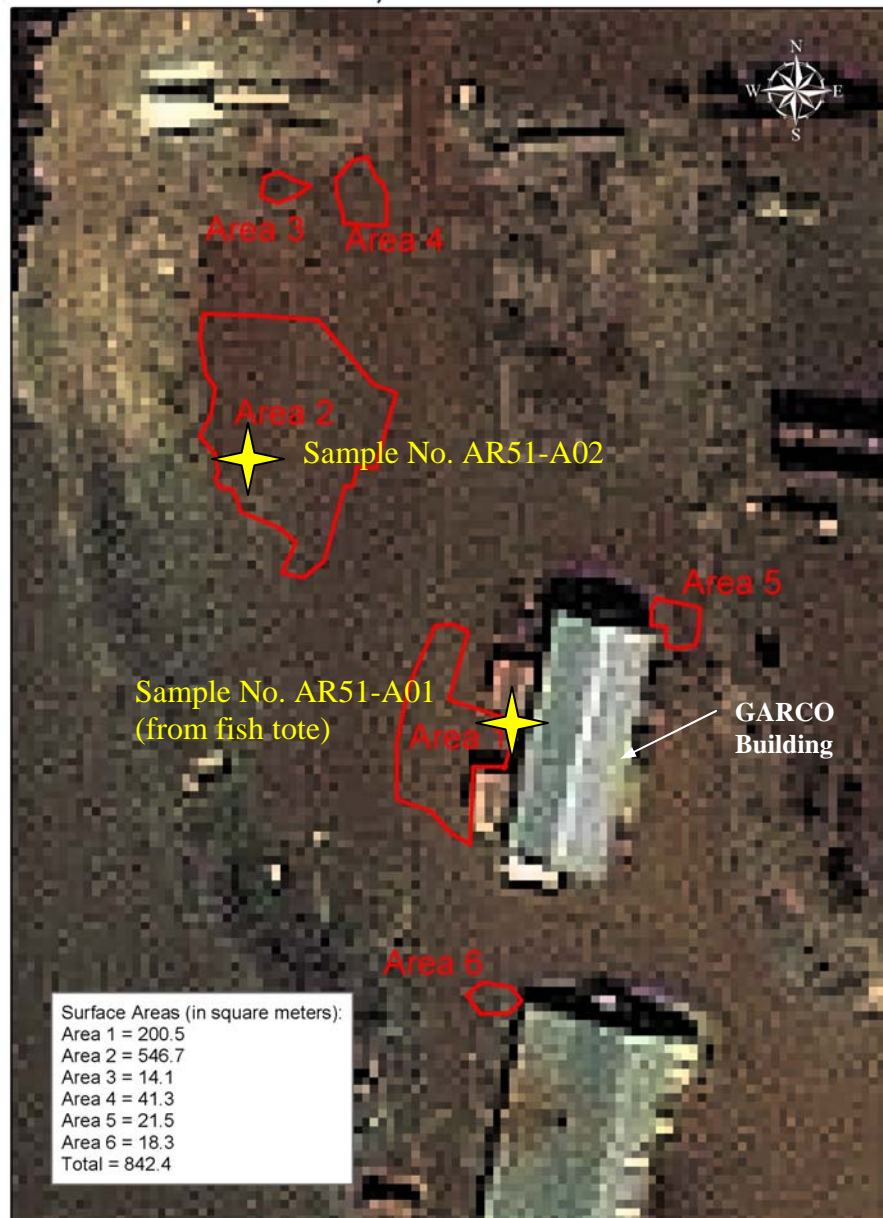
ASBESTOS REMOVAL COST SUMMARY			
PROJECT:	AREA 51		
LOCATION:	St Paul Island, Alaska		
BASIC REMOVAL COSTS:			
MATERIAL:	QTY UNIT	UNIT COST	TOTAL COST
MISCELLANEOUS DEBRIS ON GROUND	1 LOT @	\$1,500	\$1,500
TOTAL REMOVAL COSTS:			\$1,500
BASIC SUPPORT COSTS:			
	QTY UNIT	UNIT COST	TOTAL COST
MEALS	1 DAYS @	\$100	\$100
SHIPPING OF SUPPLIES	1 LOT @	\$150	\$150
TOTAL TASK COSTS:			\$250
TOTAL BASIC COSTS: (REMOVAL & SUPPORT) \$1,750			
LOCATION ADJUSTMENT:	INDEX =	1.10	\$1,925
CONTINGENCY:	PERCENT=	5	\$96
TOTAL BASIC COST ADJUSTED:			\$2,021
OTHER COSTS:			
INSURANCE	3.1 PCT		\$60
BONDING	3.0 PCT		\$60
OFFICE OVERHEAD	10.0 PCT		\$200
PROFIT	10.0 PCT		\$200
TOTAL OTHER COSTS:			\$520
TOTAL ESTIMATED REMOVAL COST :			\$2,541

NOTE: This is not a formal cost proposal. These costs are approximate, are based on general industry standards, and are based on information collected during the surveys, as well as information available at the time of preparation of this estimate. The removal costs will vary greatly depending on a number of factors.

The following assumptions have been used in assigning a dollar amount to the asbestos subtotal:

- 1) 1 supervisor and 1 worker for one day each.
- 2) This area will be cleaned while personnel are on site for other abatement.
- 3) Government to provide lodging for all personnel
- 4) Meal rate of \$50/day per individual for duration of project
- 5) Asbestos waste allowed to be disposed of on St Paul

Location of Asbestos Shingles St. Paul, Alaska 9/27/02



20 10 0 20 Meters

NOAA Pribilof Islands GIS Project



ASBESTOS REMOVAL COST SUMMARY

PROJECT: AREA 51
LOCATION: St Paul Island, Alaska

BASIC REMOVAL COSTS:

MATERIAL:	QTY UNIT	UNIT COST
MISCELLANEOUS DEBRIS ON GROUND	1 LOT @	\$1,500

TOTAL REMOVAL COSTS:

BASIC SUPPORT COSTS:

	QTY UNIT	UNIT COST
MEALS	1 DAYS @	\$100
SHIPPING OF SUPPLIES	1 LOT @	\$150

TOTAL TASK COSTS:

TOTAL BASIC COSTS:	(REMOVAL & SUPPORT)	
LOCATION ADJUSTMENT:	INDEX =	1.10
CONTINGENCY:	PERCENT=	5

TOTAL BASIC COST ADJUSTED:

OTHER COSTS:

INSURANCE	3.1 PCT
BONDING	3.0 PCT
OFFICE OVERHEAD	10.0 PCT
PROFIT	10.0 PCT

TOTAL OTHER COSTS:

TOTAL ESTIMATED REMOVAL COST:

NOTE: This is not a formal cost proposal. These costs are approximate, are based on general in standards, and are based on information collected during the surveys, as well as information available at the time of preparation of this estimate. The removal costs will vary greatly depending on a number of factors.

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TOTAL COST
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\$1,500
TOTAL COST
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\$150
\$250
\$1,750
\$1,925
\$96
\$2,021
\$60
\$60
\$200
\$200
\$520
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Industry
available at the
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